





SUPERCHARGE SCIENCE LESSONS

AICHAEL ROSEN

How to tackle topics like war

Outstanding advice from the UK's top education experts

ARE YOU A

JACK
REACHER?

TEACHER?

Don't say 'ghost'!

THE DOS AND DON'TS OF RESIDENTIALS

Boring 12.2 ?

BRING BACK THE BUZZ WITH NEWSLETTERS

ART

MAKE YOUR OWN TIGER FUR

GEOGRAPHY

ANTARCTIC ADVENTURES

LITERACY

BEHAVIC FLASHPOII

MASTER TRICKY WORDS

1756 650016

ISSUE: 16.4 PRICE: £4.99



ONE HOTHIT!

DAILY MAIL

THE WEST END MUSICAL

THEATRE ROYAL DRURY LANE

EDUCATION GROUP RATES FROM £22.50*

One free teacher ticket per every 10 purchased tickets

Accelerator Rates Available

Learn more at FrozenTheMusical.co.uk

Find out about our workshops and free enrichment resources at frozeneducation.co.uk

*Education rates available for performances from 21 October 2021 to 23 March 2023 (exclusions apply). Terms and Conditions: Rates applicable for select performances and seats only. Exclusions may apply. Not all seats discounted. Education group rates typically valid for Wednesday. Thursday and Friday evenings and Thursday matinee performances only, excluding school holiday periods and additional black-out dates that may apply as determined by Dirney in its sole discretion. Accelerator Rates are available for selected performances. Free teacher ticket must be for the same performance as the education school group, every 11th ticket free. Please enquire for details. Full terms and conditions: frazenthemusical.co.uk

Hello!



elcome to the summer term.
A lot has happened since our last issue, especially with the DfE publishing their schools white paper and the SEND review. Needless to say, some of the targets outlined in the white paper – like calls for 90% of pupils to reach expected standards in maths and English – have come under some fire from

overworked and under-resourced teachers, worried about the impact of extra pressure on pupils, and on staff.

Whether your school is headed towards this 90 per cent target or not, core subjects are likely still a key focus. Our maths special this issue focuses on a number of different approaches, from Gareth Metcalfe's ideas for making basic calculations more interesting and memorable (page 48); an exploration of how Sarah Farrell uses maths newsletters to engage parents (page 53); to an argument for bringing back differentiation – albeit with a bit of an edu-glow up – from Lisa Coe (page 59).

Literacy-wise, we were lucky enough to speak to kids' lit legend Michael Rosen about his new book *Please Write Soon*, and how tying historical events to personal stories can help children connect with both the past and present. See what he had to say on page 64. We also have a lovely book topic on the classic picturebook *Rose Meets Mr Wintergarten* on page 76, courtesy of expert literacy consultants Christine Chen and Lindsay Pickton; delve into the reasons behind grumpy neighbours, the power of cake, and develop your pupils' inference skills along the way.

Our special Plazoom section is also back, packed with free resources, classroom hacks and advice – check it out on page 80.

Last but not least, we're running a focus group to hear about what you want from *Teach Primary*. Do get in touch if you'd like to be a part of it. With best wishes and until next time,

Charley

Charley Rogers, editor
@TeachPrimaryEd1

Don't miss our next issue, on sale 1et July

POWERED BY...



SIMON KIDWELL on why primary grammar teaching isn't fit for purpose, and getting rid of SPaG tests

"This aspect of the current testing regime belongs in education's Room 101"



SARAH COTTINGHAM
explores some
counterintuitive
concepts that actually
help pupils learn

"We can use these concepts to make better decisions about how we teach"



LYNDSEY FROST shares her dos and don'ts for surviving the mud, sweat and tears of the Year 6 residential

"Be brave, be bold, have fun, and bring extra coffee... just in case!"

p4









Steps into Science

Inspiration, support and resources for primary teaching



Fresh ideas for science activities

Sustainability contexts from Steps into Science to engage your primary learners

- Fun, simple themes and activities
- Help develop numeracy, literacy and scientific skills
- Linked to topics from the primary science curriculum

rsc.li/primary_sustainability





ISSUE 16.4





We're all ears!

We want to make sure our magazine is a brilliant resource for teachers and are always striving to improve. We love hearing from real teachers about what they liked and what they would change. Got feedback about this issue? Contact us via the details in the yellow box below - we'd love to hear from you!

REGULARS

08 BREAKTIME
74 SUBSCRIBE TODAY

VOICES

15 SIMON KIDWELL Why we should get rid of SPaG tests

17 KEVIN HARCOMBE
Williamson's Knighthood controversy

19 A LETTER TO... ...teachers of gender-diverse pupils

25 UNDERCOVER TEACHER
We must resist the urge to get pulled into a downward spiral

SPECIAL SECTION

MATHS

48 MANIPULATE TO CALCULATE

Explore ideas for making addition and subtraction a bit more exciting and memorable

53 MAKE IT COUNT

Try using newsletters to help families support children with maths

56 CHANGING THE MATHS MINDSET

Why mastering mathematics is about more than just good SATs results

59 DIFFERENT STROKES

It may have a bad rep in edu circles, but differentiation is due a glow-up



We want to hear from you!

Get in touch with your rants, comments, photos and ideas.



teachwire.net



facebook.com/teachwire



twitter.com/teachprimary



charley. rogers @the teach co.com

EDITOR:

Charley Rogers, charley.rogers@theteachco.com

GROUP EDITOR:

Joe Carter, joe.carter@ theteachco.com, 01206 505925

HEAD OF COMMERCIAL SOLUTIONS:

Richard Stebbing, richard.stebbing@theteachco.com

EDUCATION

Hayley Rackham, hayley.rackham@ theteachco.com,

PRODUCT MANAGER:

Samantha Law, samantha.law@ theteachco.com, 01206 505499

DEPUTY PRODUCT MANAGER:

Katie Harvey-Jones, katie.jones@ theteachco.com, 01206 505477

SENIOR ACCOUNT

MANAGER: Hannah Jones,

hannah.jones@theteachco. com, 01206 505924

ACCOUNT MANAGER

Demi Maynard, demi.maynard@ theteachco.com, 01206 505962

ART EDITOR: Richard Allen

DESIGNERS:

Adam Barford, Kevin Dennis Clare Brasier, Charlotte Weatherley & Hannah Kemp

PHOTOGRAPHY

CliQQ Photography, cliqq.co.uk

ACCOUNTS:

01206 505995

DESIGN & REPROGRAPHICS:

Ace Pre-Press 01206 508608

SUBSCRIPTIONS

DEPARTMENT:Andrea Turner

CUSTOMER SERVICES:

aceville@dctmedia.co.uk 0800 904 7000

PUBLISHER:

Helen Tudor

DISTRIBUTED BY:

Distributed by Frontline Ltd., Peterborough 01733 555161

PUBLISHED BY:

Aceville Publications Ltd, 25 Phoenix Court, Hawkins Rd, Colchester, Essex, CO2 8JY, 01206 505900



The views in this magazine are not necessarily those of the publisher. Every effort is made to ensure the veracity and integrity of the companies, persons, products and services mentioned in this publication, and the details given are believed to be accurate at the time of going to press. However, no responsibility or liability whatsoever can be accepted for any consequence or repercussion of responding to information or advice given or inferred. Copyright Aceville Publications Ltd.



FEATURES

11 7 NEWS STORIES

You may have missed

12 6 WAYS

To tackle behaviour flashpoints

21 HOW I DO IT

Keep the editing process neat and tidy with tracing paper overlays

30 MEDIUM-TERM PLAN

Investigate the material world with KS1 using this six-week science unit

35 DIVING INTO FRESHWATER

This precious natural resource is a timely topic for cross-curricular learning

36 LEARNING CURVE

Forget libraries, think marathons – the way we acquire knowledge might sound counterintuitive, but it works...

38 COLLABORATE AND LISTEN

Are you new to the classroom and not sure how to work with your TA? Here's what you both need to thrive

41 MUD, SWEAT AND TEARS

Pack plastic bags, and don't EVER say 'ghost': a teacher's guide to the residential

44 ARE YOU A JACK REACHER TEACHER?

Stuck on the hamster wheel? Perspective and acceptance are the keys to improving your teaching and your wellbeing

RESOURCES

80 THE PLAZOOM ROOM

Activities, ideas and free resources for all your literacy needs

LESSON PLANS

86 GEOGRAPHY

88 HISTORY

90 ART

REVIEWS

92 SUMDOG

93 WHIZZ EDUCATION

94 YOUNG ENTERPRISE

95 HAL LEONARD

96 FFT

97 PSTT



64 MEET THE AUTHOR

Michael Rosen on how to make history relevant for children

67 BOOK TOPIC

Discover the power of cakes while developing inference skills with this beloved picturebook from Bob Graham

73 IT'S IN THE SCRIPT

Well-formed, clear handwriting doesn't just look good – it's an indicator of improved outcomes, well beyond the end of KS2

76 BOOK CLUB

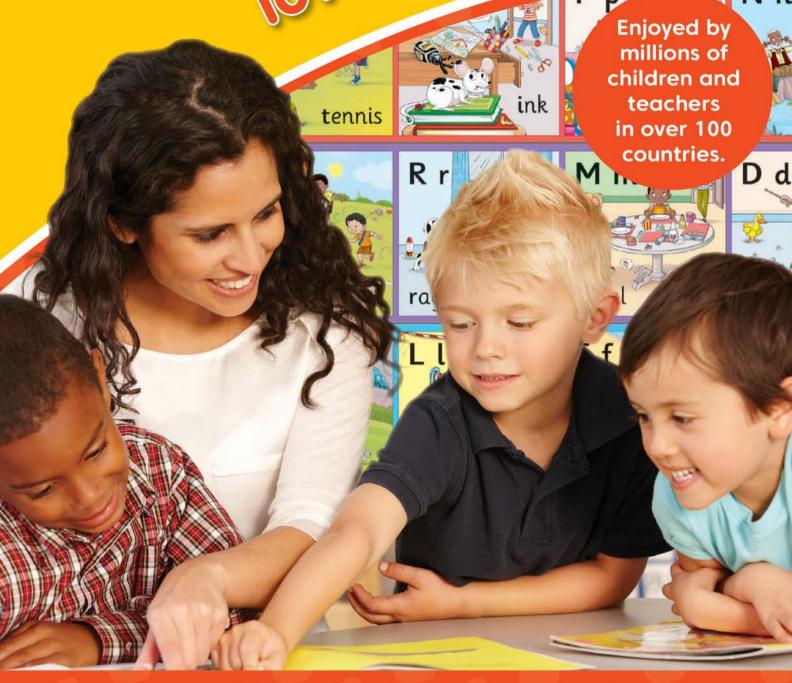
We review five new titles that your class will love



√ Validated by the Department for Education







The wonderful way to teach reading and writing

Breaktine

News | Interviews | Ideas | Resources | Research



Big Breaktime

The NSPCC is calling on nurseries and schools across the UK to down tools for the Big Breaktime, which will raise money to help keep children safe from abuse.

On Friday 10 June – the charity's flagship day of fundraising, dubbed Childhood Day – children and adults are encouraged to have an extra hour's break from the school day to focus on playing and having fun. The break can happen at any time that suits the school, and the charity is asking pupils, staff and parents who can, to give a small donation. The money raised will go towards NSPCC projects such as 'Speak out. Stay safe.', which gives primary-aged children the knowledge and confidence to speak out about anything that's worrying them, including abuse, so they can get help. Find out more about how to get involved at **tinyurl.com/tp-BigBreaktime**

3 INSTANT LESSONS...

(You're welcome)



MEET AN AUTHOR

Puffin Books is producing a series of live events throughout the summer, that virtually bring beloved authors into schools. Events will run on Fridays at 10.30am, from May to early July. See the lineup and resources at tinyurl.com/tp-PuffinAuthor



UKRAINE SCHOOL

Ukraine School is a free online platform to help bridge the language gap for children with little or no English and their new teachers and classmates. The app allows teachers to set homework, run class projects and more, all of which can be translated into Ukrainian. Visit tinvurl.com/ tp-UkraineSchool



INCLUSIVE SCHOOLS

LGBTQ+ youth charity Just Like Us has released more than 50 free inclusive resources ahead of Schools Diversity Week, which takes place in primary and secondary schools across the UK from 20–24 June. Download yours at tinyurl.com/tp-InclusiveSchools



RESOURCES



Right Royal Resources

Are you looking for ways to link this year's Platinum Jubilee celebrations with the curriculum? Literacy specialist website Plazoom has three resource packs – for KS1, KS2 and the whole school – which encourage children to think about chronology as well as building comprehension and writing skills. Find them at

bit.ly/PlazoomPlatinum

Healthy Eating Week

The British Nutrition Foundation is aiming to raise awareness about healthy and sustainable diets, empowering children to make positive changes. This year, Healthy Eating Week is celebrating its 10th anniversary, and runs from 13-17 June. The focus for the 2022 event is how to 'Eat well for you and the planet', and aims to help debunk misunderstandings about what healthy eating actually means. Sara Stanner, science director for the BNF, said: "As we look to the future, ensuring our diets are not just healthy for us, but for the planet, is critical – food production currently contributes to around 37% of greenhouse gases." Find out more and sign up at tinyurl.com/ tp-HealthyEatingWeek



Support Ukrainian children

Literacy charity Bookmark Reading is launching an urgent appeal to raise £1m to supply books, tablets and sensory games to Ukrainian refugee children. The money will provide 5,000 Bookmark Boxes to children aged 5-9 arriving in the UK. The boxes will be distributed through local authorities, the Association of Ukrainians in GB, and charities, and has been designed in conjunction with teachers and other literacy experts. Contents will include familiar Ukrainian books as well as picture books that reflect the refugee experience. Learn more and donate at tinyurl.com/tp-BookmarkBox



60%

OF 5-11-YEAR-OLDS ARE CONCERNED ABOUT ANOTHER PANDEMIC, AND 50% ARE WORRIED ABOUT MORE ANIMALS BECOMING EXTINCT, ACCORDING TO BT'S 'A BRIGHT FUTURE' REPORT

Look ahead | Book ahead

BRAKE KIDS' WALK
Brake's Kids Walk
takes place on 22
June 2022. Let's
shout out for safer
roads in our
communities!
Learn more and
sign up at brake.
org.uk/kidswalk



MATHS WEEK

Maths Week London runs from 27 June – 1 July, with a mission to ignite children's love of the subject. Visit



mathsweeklondon.org

Q & A



Ben Garrod

Professor of Evolutionary Biology, author and presenter

What was primary school like for you? Lots of fun. I was lucky enough to have some amazing teachers, who helped encourage and inspire my love of science and nature. We also had a huge field, with lots of wilder areas, which were always fun to explore and go searching for insects.

What is your favourite fact you learned while writing the series?

The thing which has really jumped out at me is how extinction is an entirely natural process in the 'lifetime' of any species – they evolve, they thrive, and they eventually go extinct. But this doesn't mean we should just ignore extinction or that we shouldn't try to prevent it in many cases. Right now, we have the power to prevent the loss of over one million species that would otherwise be safe if it wasn't for the way we treat the natural world, so we have an obligation to get involved.

How would you like teachers to use the series in the classroom?

These books are springboards into deeper conversations and more complex discussions. I always think science is about coming away with more questions than when you started, so although my books are packed full of information, ideas and amazing illustrations, I'd love to think they provide opportunities for far more ideas, discussions and even some gentle arguing, maybe.

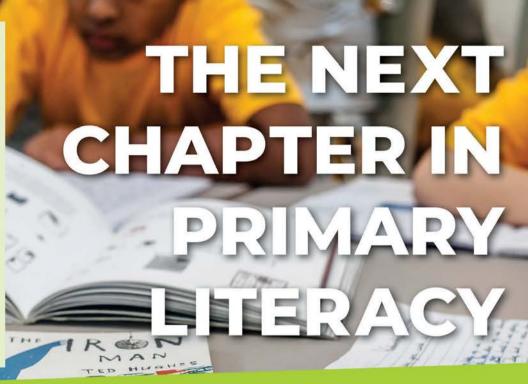
The final book in Ben Garrod's EXTINCT series (Zephyr) is out on 12 May and focuses on the critically endangered Hainan Gibbon.





"We love that the plans ensure that the teaching of writing is anchored to a really high quality text and that grammar is taught at the point of reading and writing."

Selincourt Primary, Wandsworth



The complete, book-based approach to primary school English



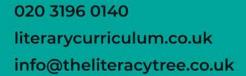
Open the cover to the Literary Curriculum, the online platform that provides complete coverage of your entire Programme of Study through...

- · 300+ book-based resources with cross-curricular links.
 - · Spelling and reading comprehension resources.
 - · Progression and coverage documents.
 - · Termly subject leader meetings.
 - · RATE Assessment tools for reading and writing.



START YOUR STORY

Explore the Literary Curriculum, download free plans and join us on our next webinar to find out more: www.literarycurriculum.co.uk/how-it-works











you might have missed

EMPOWERING TAS

International teacher training provider, Tes, has launched a new qualification to help teaching assistants upskill. The new Level 3 International Teaching Assistant Course is designed to qualify TAs to help schools cater to increasing numbers of pupils. The course is delivered through a combination of online and in-school delivery, and is available at three different levels depending on the needs of the school and region. Those taking their first steps to becoming a qualified TA may choose to complete the award, whereas more experienced staff who want to advance their skills and develop their practice can choose a certificate or diploma. The course is now open for registration, with the first iteration beginning on 1 September 2022. Each course length varies depending on the level chosen. Find the full details at tinyurl.com/tp-TesTA

RIGHT PLACE, RIGHT TIME

The end of March saw the publication of the Department for Education's SEND Review, Right support, right place, right time. It reports key facts about the SEND and alternative provision system such as that the most common type of need in state-funded primary schools in 2021 was speech, language and communication (34 per cent). Commitments to improved provision include an increase in total investment in schools' budgets by £7bn by 2024-25; to consult on the introduction of a new SENCo National Professional Qualification; and to commission analysis to 'better understand the support that children and young people with SEND need from the health workforce' Read the full review at

tinyurl.com/tp-SENDreview

ALL TOGETHER NOW

The Commission on Young Lives, launched in September 2021, has released its third thematic report, All together now: inclusion not exclusion. It focuses on the education system specifically, and follows on from two previous publications in December 2021 and March 2022, on children's social care and family support. Some of the proposals include a call for 'alternative provision' to be renamed 'specialist provision'. and that no school should receive a 'good' or 'outstanding' Ofsted rating without fulfilling a new inclusion requirement. Anne Longfield CBE, chair of the Commission, said: "We need to ask how the system has ended up providing plenty of incentives for schools to use exclusions and other off-rolling methods to game league tables and Ofsted inspections, when in fact it should be incentivising schools to help all children to achieve." See the full report at tinyurl.com/tp-COYL



THE BEST START IN LIFE

On 26 April, Ofsted published a new five-year strategy. It focuses on the 'guiding principle' of 'improving lives by raising standards in education and children's social care'. The document also sets out the strategic priorities for Ofsted from 2022–2027, which include a stronger focus on Early Years, keeping pace with sector changes, and to 'continually review' its approach. The inspectorate vows to be open and accessible to different audiences, 'making it simple for everyone to understand what [they're] saying, and to work with [them]'. Amanda Spielman, Her Majesty's Chief Inspector, said: "We recognise the outstanding work Early Years providers have done to help children recover what they missed, and this strategy aims to increase our support for a workforce that is so deeply devoted to what it does." Read the full strategy at tinyurl.com/tp-OfstedStrategy

SYSTEM UNDER PRESSURE

w research from The Royal National Institute of Blind People (RNIB) has revealed that many children and young people with vision impairment (VI) in England are not receiving the specialist support they need. The information has come from an annual Freedom of

Information request, and shows a system under significant pressure. More than three quarters of local authorities have cut or frozen budgets for specialist VI education support in the past four years, and so children with VI are not getting the same opportunities as peers without VI. Caireen Sutherland, RNIB's head of education, said:

"Young people with vision impairment require specialist support to access the curriculum, navigate their school and environment, take part in sports or games and learn on equal terms with sighted children. This enables them to develop the essential skills they need to succeed, not just at school, but as adults with full lives." Find out more at tinyurl.com/tp-RNIB

SUSTAINABIITY AND CLIMATE CHANGE

The Department for Education's recent sustainability and climate change strategy for the education and children's services systems sets out short, medium and long-term actions to 'enable us to make progress towards achieving our four strategic aims and overarching vision'. The strategy's vision is to make the UK the world-leading education sector in sustainability and climate change by 2030. Activity to support this aim will include increasing opportunities for climate education and access to nature; driving opportunities to increase biodiversity and climate resilience; and co-ordinating and leading a whole-setting approach to climate change and sustainability. Find the full strategy at

tinyurl.com/tp-ClimateStrategy

PLATINUM JUBILEE

From mid-May, children in state-funded primary schools across the UK will begin to receive a free commemorative book to mark Oueen Elizabeth II's Platinum Jubilee. Celebrating Her Majesty's 70-year reign, the book was written in collaboration with royal experts and historians and tells the story of a young girl, Isabella, visiting her Great Granny Joyce who tells her all about the Queen and the coming Jubilee. The book also includes famous quotes from the Queen, content on the lives of famous Commonwealth figures such as Nelson Mandela, and a timeline of Queen Elizabeth's life. On the request of the Scottish and Welsh governments, schools in Scotland and Wales will be asked to opt-in to receive copies of the book, which will then be delivered in late September.

FEATURES BEHAVIOUR



6 WAYS to tackle behaviour flashpoints

Getting your response right during and after the pivotal moment can make or break a child's learning readiness

1 | FOCUS ON EMOTIONS

Behaviour is a child's way of communicating an unmet need, so make a conscious decision to work on identifying the emotions that have caused behaviour incidents, rather than the behaviour itself. Think back on past scenarios, how you responded then and how you might approach it differently now. Focusing on the underlying emotions — the fuel for the fire rather than the flames and smoke that you see in the behaviour — will ultimately help you to help the child build the strong foundations of emotional wellbeing that they need to reach their full potential.

2 | TAKE A MOMENT

Being mindful of your response to behavioural incidents will help you to 'co-regulate' or work with the children. This means making sure to steady yourself before you can understand what is happening for a particular pupil when there is a behaviour flashpoint. Stepping back and taking a brief moment of time — for example being aware of your breathing and trying to deepen and/or slow it down — allows you to make a conscious, deliberate response. This, in turn, helps to reduce the liklihood of worsening the situation, and will provide a calm atmosphere in which to resolve whatever is happening for the child.

3 | BE CAREFUL WITH LANGUAGE

You can make sure to be considerate with your words by saying things like, "Wow, I'm wondering if you're really angry," in order to establish why a child has reacted in the way they have, rather than saying something more direct, such as "I know you are angry." The language you use is important because it provides the space for the child to do some thinking with you. As an adult, it can be frustrating when somebody tells you that they know how you feel. Well, the child feels the same but doesn't necessarily have the social niceties to accommodate those frustrations.



Viv Trask-Hall is a former primary headteacher and principal trainer at the Thrive Approach, an organisation that specialises in training education professionals to support children's emotional and social development.

4 | MAKE ROUTINES MATTER

Predictability and routine play important roles in preventing behaviour issues in the first place. For example, children feel safer and steadier when they can predict what is going to happen around them. Using techniques such as visual timetables on the classroom walls can help your pupils orientate themselves, and therefore may prevent feelings such as stress and anxiety that can in turn lead to meltdowns. This is particularly useful during transitions between subjects, or when phasing into and out of lunchtime and playtime.

5 | WORDS AREN'T ALWAYS ENOUGH

Creativity and play can give children the means to express their emotions far more articulately than through words. Pupils who present distress behaviours often find it difficult to explain in words what has happened and why they feel the way they do. Asking them to describe a situation in words relies on a very complicated process of cognitive executive functioning. We are used to that as adults because we can draw on a large vocabulary, but the pathways to those words are less secure for children. Puppet, sandbox or construction play, or art and craft sessions, can help a child express those feelings more clearly. To some eyes, this can look like rewarding children who have not learned to be steady in the classroom. However, it's actually the opposite because it can help to swiftly settle behaviour and allow these pupils to be ready to learn, faster.

6 TUNE IN

We all know what it feels like to be busy or distracted. We can all be present physically, but sometimes, our minds are somewhere else. So, once you have self-regulated, you then need to mentally tune into the situation at hand. The child in question may be feeling angry, disgusted or frustrated but, whatever their emotion(s) may be, make sure to focus in on the feelings that are driving the behaviour, and that the child knows you value them.



Aligned to Letters and Sounds





Introducing
Success for All
Phonics From FFT

A proven systematic synthetic phonics teaching programme

Book onto a free overview webinar now fft.org.uk/phonics



*The subscription includes free access to an online Reading Assessment Programme and a Tutoring programme.





Can your school help pick a winner?





The Royal Society would like to invite you and your students to apply now to be a judging panel for the Young People's Book Prize 2022.

How does it work?

Successful applications from schools and youth groups receive a free set of the six shortlisted books, as well as a comprehensive set of judging materials to guide your group in choosing a winner.

Then, it's over to you to form a judging panel of under-14s that meet to discuss the books and decide a winner between September 2022 and January 2023.

In February 2023, results from hundreds of judging panels across the UK, made up of thousands of young people, are combined to decide the ultimate winner.

How can I get involved?

To register your group of students to become a judging panel and to find out more about the prize visit **royalsociety.org/ypbp-panels**

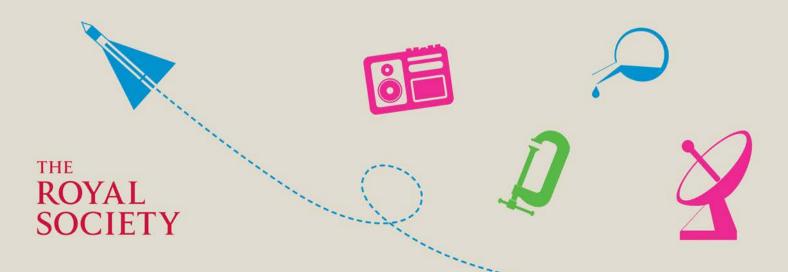
The deadline for applications is Monday 18 July.

"We really enjoyed this experience...
I don't think any of us would have picked up a science based book to read for pleasure before we did the judging but I'm sure that has now changed!"

Grace, Rhys, Tamrin and Kiah, ages 11 – 14, North Durham Academy

"Loved the resources and cannot praise the event enough for building confidence and interest in science literature among pupils."

Miss MacGregor, St. Joseph's College



Simon Kidwell VOICES





SPAG TESTING BELONGS IN ROOM 101

Though rigorous and high-quality grammar teaching is essential, our assessment system needs an overhaul



🥤 @simonkidwell

his month, we will see the return of statutory assessments for 10–11-year-olds in England. Although the government has made the sensible decision not to use school-level results to rank performance, one aspect of the current testing regime definitely should be permanently consigned to education's Room 101: the SPaG test!

Let me explain. My principal objection to the SPaG (spelling, punctuation and grammar) test is that the content of the grammar curriculum on which it's based isn't fit for purpose. Almost all of the teachers I talk to recognise the importance of teaching grammar, but the current practice of shoe-horning it all into the primary years without building on it at secondary is completely wrong-headed.

Statutory testing at ages 10–11 is long-established, and, apart from in 2020 and 2021, every one of my 28 years of teaching has included SATs. I've worked in a rich variety of schools, too; some with the highest test outcomes in their locality, and some with the lowest. I am broadly supportive of national testing at the end of KS2, but there are still problems with the blunt accountability levers applied to SATs results.

For example; I recently spoke to a former student of our school, Mary Smith. She was part of the first cohort of children that took the new SPaG tests in 2016. At the time, Sky News visited the school to ask pupils about the assessments, and Mary said: "All through my primary school, I've been learning about connectives to join sentences together, but now I'm in Year 6, I've got to learn about subordinating and coordinating conjunctions, and it's really confusing."

Mary is now in sixth form college, and I asked her to revisit her Sky News interview. She reflected on the complex grammatical terms that she learned at primary school, and told me that the concepts weren't covered in any depth when she got to high school. When I asked Mary to explain the terms 'coordinating' and 'subordinating conjunction', she couldn't. For the record, Mary is an A* student, part of the Oxbridge programme at her college, and one of the most conscientious pupils I have ever taught. Yet, she remains bewildered by why she was taught some of the more complex grammatical concepts at such a young age.

And it's not just pupils that are flummoxed. Plenty of teachers don't agree with the system either. To test this theory,

I posted the following on social media back in March:

Since 2014 I have spoken to a senior politician at the DfE and experts in the field of teaching grammar, and I am yet to meet anyone who believes that the current grammar curriculum for primary schools is fit for purpose or age-appropriate.

I had plenty of replies.

One teacher, Alison Vaughan, commented: "The overloaded grammar curriculum holds back learning for those with poor working memory and slow processing. These students are already working hard to remember punctuation and spelling [...] They need more time consolidating the basics, not complex terminology."

My colleague, headteacher Michael Tidd, added: "I think some of it is just pointless at primary level (I'm looking at you, subjunctive form!) and ends up being overly simplistic because of that. I think much of it is too soon: expanding on nouns is useful, but teaching "expanded noun phrase" as required terminology to six-year-olds, in the same year as the criterion to "write capital letters of the right size" is clearly absurd. It just feels like someone planned a 5–14 curriculum that made sense and then just squashed the grammar part!"

Objections extend beyond the classroom, too, with The Times reporting that the government's key curriculum adviser, Tim Oates, said that there was a "genuine problem about undue complexity in demand" in the content of 2016's SPaG test.

A lot of the issue, then, is with curricular sequencing, or a lack thereof. The teaching timeline for these complex concepts is out of whack, and we need to reconsider at what point we should be expecting our pupils to understand and absorb them. Even Ofsted acknowledges the importance of a well-sequenced curriculum. Its School Inspection Update from January 2019 states: 'Since knowledge exists in rich schemata, an effective curriculum ensures that pupils are taught concepts and skills in an order that enables them to make useful connections that are not misapprehensions. This is what Ofsted understands by appropriate sequencing in the curriculum.'

So, then, though most of us as teachers and school leaders recognise the importance of a high-quality and ambitious grammar curriculum, now is the time to revisit its design. **TP**

Simon Kidwell has worked as a headteacher and school principal for 17 years, and has led three successful primary schools to achieve rapid and sustained improvement.



With the cost of living soaring, we've made a promise to bring adventure to all! We've frozen our prices to make a trip with Kingswood even better value. Comfortable accommodation, bedding, great food and even evening entertainment is all included with us.

Our award winning programmes will help boost confidence, build resilience and ensure memories to last a lifetime!

Availability is limited so book now!



Gavin Williamson showed all the skill and gravitas of his Labour predecessor, Balls, doing a dad-dancing salsa, Gangnam-Style, on peak-time TV

Kevin Harcombe



@kevharcombe

here is usually a dollop of honour ladled out from the government troughs twice-yearly to education, mostly very deserving; it's always good to see a dedicated lollipop person get an MBE, or a long-serving governor pick up a gong for 'services to tedious and unnecessary meetings'. Hats off to them all and well done!

Occasionally, however, an honour is bestowed on a person which attracts dumper-truck loads of steaming opprobrium from all quarters – such as the knighthood recently awarded to Sir Gavin Williamson, former Secretary of State for Education.

The post of SoS for Education is akin to the Defence Against the Dark Arts job in the Harry Potter stories; incumbents seldom last long and always come to a bad end. There have been 13 since 2000. Ed Balls (2007-10), an erudite economics professor at Harvard, is now chiefly remembered for appearing on Strictly. Michael Gove (2010-14), a journalist, reconstructed the national curriculum to make it more like a third-rate regional grammar school from a 1950s comedy film, and restored traditional sit-down written exams to see which students could remember the most stuff. In so doing, he demoralised teachers (not difficult, admittedly) and angered parents (also not difficult) to such an extent that his close friend, David Cameron, felt it necessary to sack him before Gove replaced iPads with slates and chalk and introduced compulsory rickets for low attainers.

Gove also memorably issued every school with an ornate copy of the *King James' Bible* – a magnificent landmark in English writing, but not at all child-friendly (no book without dinosaurs or underpants has a chance). Currently this mighty tome is being used in most schools to wedge a door open for ventilation to keep Covid-safe.

So, Sir Gavin is not unique in not being good at it – he is unique is in being spectacularly not good at it. He wasn't just slightly out of his depth as Education Secretary, he was at the bottom of the Mariana Trench, blindfolded and in concrete slippers. His attempt to solve



the Covid exams crisis not with sensible Teacher Assessment but with an untested algorithm (sounds high-tech but was quite possibly just a couple of dice rolled from an egg cup during a cheese and wine lockdown party at the DfE) led to ruined lives and a vitriolic hatred amongst affected parents to the extent that Sir G had to shoulder responsibility and... get the head of Ofqual to take the rap instead of him.

When the school meals crisis blew up and Marcus Rashford was doing the job the government should have been doing, Williamson told a newspaper he had held a Zoom meeting with the campaigning footballer, when in fact he had met a completely different black sportsman, Mario Itoje. In short, Gavin showed all the skill and gravitas of his Labour predecessor, Balls, doing a dad-dancing salsa, Gangnam-Style, on peak time TV.

Before stumbling into Parliament, Gavin had been in fireplace sales (salesperson of the year 2007 and 2008) so he does have skills of persuasion. I'm not at all snooty about his previous occupation – sales is tough and he clearly excelled at it, but it didn't exactly prepare him for the role of Education Secretary. It's almost as though he got the job just because he was Johnson's mate. He progressed from flogging fireplaces to managing leadership campaigns; 'flogging' both feckless Theresa May and buffoon Boris Johnson to the Tory membership. That shows real skill – if no understanding of what a good leader actually is. Perhaps his 'K' was a thank you from them? It certainly wasn't from popularity among parents or teachers, or indeed his fellow Tory MPs, who variously and openly referred to him as Private Pike, the hapless junior bank clerk from *Dad's Army*.

I met him briefly and he seemed a pleasant chap and would probably make a really nice neighbour. He is married to a former primary teacher – so he probably knows his way round a laminator – and has been a school governor, but had no other qualification to run the DfE.

The last SoS with any education expertise, the former comprehensive teacher, Estelle Morris, resigned after a year saying she'd realised she wasn't up to the job. If only she had known 'not being up to the job' would come to be qualification for major honours she might have been Dame Estelle by now. **TP**

Kevin Harcombe is a Teaching Awards winner and headteacher at Redlands Primary, Fareham.



KIDS' BUCKETS ARE FULL OF WORRIES'

We all lend a sympathetic ear to our pupils, but the government needs to step up and improve official counselling services

ow many times have you questioned yourself after coaching a child on difficult life situations? Do you continue to think about your pupils at weekends and out of school hours, particularly when you encounter issues such as self-harm? These kinds of conversations can really take their toll. As practitioners, we are not trained to provide the best counselling to young people in our schools, and while we may use our parenting skills and own life experiences in this demanding and ever-changing profession, sometimes, we simply can't keep up.

The pandemic has had a significant impact on the mental health of everyone, especially children, and there has been a considerable increase in the number of young people needing treatment for severe mental health issues since 2019. School-based counselling could help fill this gap; it's one of the most prevalent forms of psychological therapy for young people in the UK, particularly because existing services often fail to meet their psychological needs.

Don't get me wrong, as classroom teachers we all make small adjustments to our practice in order to improve our relationships with children, lower their anxiety, and help them develop resilience in the face of setbacks. But I still see students coming into school every morning with their 'buckets' full to the brim with worries. They are not in any condition to function properly, let alone learn anything new.

Recently, I was fascinated to hear what our pupils had to say on wellbeing provision during an informal survey, organised with Citizens UK. All of their responses pointed out a dire need for immediate, professional wellbeing support in addition to what we already provide. I am sure that everyone will agree that most schools are

trying to do their utmost to provide the best internal support they possibly can to ensure that children have the strongest start to their lives. For example, as a result of pupil feedback, we are aiming to put together training for students to support their peers and help them build resilience. We're also providing 'Worry Monsters' (special boxes where children can post notes outlining their worries in words or pictures), which the pupils specifically requested, and I use a 'Things I wish my teacher knew' jar in my classroom; the children write their names on the notes so I know who to speak to at the first opportune moment, and it has been a really purposeful change. Since starting to use the jar, my bond with my class has strengthened even more, and some children now regularly ask for my advice regarding fall-outs

with their peers and out-of-school problems; I feel that it helps my class to be happier, safer and they encounter fewer problems with socialising.

So, we've made some positive progress, and I'd imagine most of us agree that providing a 'listening ear' to young people is the first step to successful school-based counselling. However, professionally trained and nationally accredited counsellors are essential to the kind of robust support that schools and pupils need. We can't do this by ourselves; we just aren't trained to do so. Even where schools may have support staff, absences due to Covid, lack of a discreet space in schools for counselling, or staff being stretched too thinly mean sessions often don't run smoothly, regularly or consistently. We need backup.

In order to make sure our young people are getting the help they need, I urge the government to engage with Citizens UK to secure the statutory provision of school-based counselling in schools across England. Because while the specific impact of one-to-one counselling sessions on academic attainment is yet to be measured, the essential role of pastoral support is more than enough of a reason to provide these services. After all, it's not all about the marks, is it? TP

Sanchita Chaudhary is deputy headteacher at Kingsway Primary School.

"Professionally trained and nationally accredited counsellors are essential to providing the kind of robust support that schools and pupils need. We can't do this by ourselves."



Each issue we ask a contributor to pen a note they would love to send

A letter to...

teachers o genderender-liverse kids

Joel Groves on why primary schools play such an important role in allowing children to be themselves...





Looking back at primary school, I remember a mostly happy time. They're some of the best days of our lives, after all. But for me, and so many other people

like me, the joy of learning, making friends, story time and play are overshadowed.

You see, I'm transgender. I was transgender at primary school too, though I didn't understand that fully yet. I'm well into my 20s now, and as an adult I love being transgender. I love the pride I feel in myself and my community, I love being able to educate on trans inclusion, and I love being able to push for social change.

Being transgender is integral to my identity - it's a big part of what makes me, me. I'm old enough now to embrace the challenges that being an openly transgender person can bring, but when I was at primary school, I was none of those things. I wasn't proud, I wasn't understanding of myself, and I certainly wasn't equipped to face transphobia or social exclusion. I was just a confused and scared little boy trying desperately to pretend to be the little girl everyone else saw me as.

At home I was very lucky – my parents never tried to push traditional gender roles on me. I was allowed to wear what I liked

and play with what I liked, and I was happy. But my experience in the classroom was less accepting.

I loved my teachers and friends, but it was confusing yo-yoing from an environment that encouraged me to be myself, to one where everything was rigid and gendered. My co-ed school felt highly segregated. Everything was boys or girls, never either or both, and I felt like a fraud when I was made to join the girls' groups.

I have one very distinct memory of playing with dolls in the classroom one day and declaring confidently that I was going to be a daddy when I was older. All the girls I was playing with laughed and my teacher corrected me: "Don't you mean a mammy? Girls grow up into mammies, and little boys grow up into daddies." That left me feeling incredibly confused and ashamed. I certainly never said anything like that again. It might sound like a small comment, but I know that the following 15 years of my life could have been quite different if the response had simply been: "Really? Ok!"

The message from everyone and every story book at school was clear: it doesn't matter how you feel inside, you must be a girl. And I believed it. Because of this, I didn't have any understanding of being trans, nor the confidence to speak up and come out until I was 21, which is a really long time to hide such a significant part of who you are.

But it didn't have to be like that, and still doesn't. I really believe teachers are incredible people who have the ability to transform young trans people's lives. You don't need to be any kind of expert either you just need to be an ally.

One thing you can do is discourage unhelpful gender stereotypes. Being told repeatedly by peers and teachers at primary school that I should behave in certain ways because of my perceived gender was really damaging, and segregating us by gender didn't help either. It also would've been incredible for younger me to have been able to read books that feature gender-diverse children. The charity Just Like Us has a recommended reading list that might help you; find it at tinyurl.com/tp-SchoolDiversityWeek

Talking about diverse families, such as having same-sex parents or a trans sibling, would've helped me loads too. And perhaps even organising some kind of Pride celebration during School Diversity Week, so that all pupils feel safe and welcome.

Your allyship won't just help trans young people, but all children, to be equipped for our diverse world and show them that they can be themselves in school - no matter their gender identity or how they express it. This will help ensure that when pupils reflect on their time at school when they're my age, their memories are nothing but shining and bright.

From Joel

Joel Groves is trans and a volunteer ambassador with Just Like Us, the LGBT+ young people's charity that runs School Diversity Week, celebrated by thousands of primary and secondary schools every June.



Organised by



Sponsored by

esure

On Wednesday 22 June thousands of kids will put their best feet forward to promote road safety and the health and planet-saving benefits of walking

THOU.

for your FREE action pack, including posters, lesson plans and activities featuring Shoun the Sheep

brake.org.uk/kidswalk kidswalk@brake.org.uk

Schools can FUNDRAISE

to help Brake support families that have been affected by road death and serious injury



Brake's Kids Walk is a great way for our school to raise awareness among the community of how we can create a safe environment to enable children to walk, while also raising money for a worthwhile cause.

Iris Smith, HLTA, Penshurst Primary School



How I do it

Keep the editing process neat and tidy with tracing paper overlays...

ELENA BEZOARI

.....

To begin with, we discuss the importance of the editing and redrafting process and I show the class a video of Austin's Butterfly (you can see a version on YouTube at tinyurl.com/tp-AustinsButterfly). This demonstrates to the children the impact and power of helpful critique and having multiple drafts. With time, focused targets and some guidance, pupils are also able to achieve much greater results within their writing.



o your children struggle with proofreading their work? Once they've finished a piece of writing, do they hate redrafting it? This used to be a battle for some of my pupils until I discovered the power of tracing paper. I was forever trying to find ways to motivate children in the editing process and now I've found the Holy Grail! By using tracing paper to refine their written work, my class now enjoys proofreading, and editing is no longer so painful. Such a simple idea; easily implemented and it packs a powerful punch.

0000>

After completing a piece of writing, ask pupils to tape tracing paper on top of their work along the left-hand side. There are two ways that the tracing paper can be used. One is for the children reread their work and add asterisks to their working page – all additional sentences, words, and paragraphs can be added onto the tracing paper – this way their writing page still looks neat.



Another way pupils can use the tracing paper is to identify certain features of composition. Give the children a list of specific targets you want to see in their writing. They can then create a key, and using the tracing paper, they underline and highlight in different colours when they identify the feature in their work. I find it gets them excited when they spot a target – it also forces them to edit their writing so they can tick it off.





By encouraging the children to use this method of editing, you can empower them and

make them fully engaged in the proofreading and redrafting process. Pupils will then know that they can add or change sections without ruining or having to rewrite their work. They will therefore see a purpose to editing, and can physically see how their work has been improved.



As well as using the tracing paper technique, my children often ask for editing slips within the lesson. We tape

these small strips of paper into the margin, and they allow the children to add extra information to their work without the page looking messy. This process has now become second nature to the pupils, and they've shown huge progress since September. Simple, yet hugely effective!



Elena Bezoari is a Year 6 teacher with a passion for creative teaching ideas.



SCHOOLS - PROVIDING THE STAFFING YOU NEED

Aquinas Education are an educational recruitment agency working with schools across the UK for the past 14 years. We have worked in partnership with schools across the country offering exclusive rates and incentives that no other agency can offer. We are an agency that cares about the schools we work with.

aquinas education

www.aquinaseducation.co.uk

We can help with day-to-day, short term, long term or permanent recruitment needs. We have dedicated client managers, consultants and candidate consultants that work relentlessly on recruiting and ensuring all teaching staff are compliant.

WHAT ARE THE BENEFITS?:

- Social network of over 350k teachers worldwide
- Foundation support backed by Jermaine Jenas our director (Ex-England and Tottenham Hotspur footballer, now TV pundit)
- The foundation helps with areas such as attendand and attainment but can be tailored towards the school's needs
- Guarantee on quality or you do not pay
- Full compliance checks on schools' portals and Ofsted downloadable reports REC and CCS accredited
- Exclusive rates for day to day supply for teachers and support staff



TEACHERS - RECRUITMENT PLATFORM

Why Aquinas Education?



Best schools

Aquinas work with the best schools from around the globe. Connecting them directly and instantly to teachers.



One click job apply

No awaiting job deadlines or going through a third party, one click and your professional profile is sent directly to the decision maker.



Affordable and ethical recruitment

Making recruitment accessible, affordable and ethical for every school and teacher.



Global recruitment option

Our teaching database covers the whole globe. Aquinas actively recruit, market and advertise on every continent.



Easy to communicate

The Aquinas platform has instant messenger to allow total transparent communication between school and teacher.



Q&A's community

The ability to ask a global community questions on teaching, locations and also help and advice.

At Aquinas Education, we're proud to introduce you to our Teacher Recruitment Platform that allows you - the school leader - to have total control and visibility of your teacher recruitment. Instant and direct communication with your own unique shortlist of teachers.

The Aquinas Platform is revolutionary technology. Schools can communicate directly and instantly with teachers across the globe, so your usual recruitment pool is expanded on a global scale. Simply register your school and create your profile, post teaching roles and be proactive in searching and communicating with teachers via the instant messenger section. Check out the Aquinas new platform at **www.aquinaseducation.co.uk**

WHYI LOVE.

The Royal Mint Museum team talk about their annual short story competition for primary pupils, and how it can help promote literacy in your classroom

LATEST WINNER:

This year's winner is 10-vear-old Joshua Boholst from St Cecilia's Catholic Primary School in Surrey



TALKING ABOUT:

THE ROYAL MINT MUSEUM'S ANNUAL SHORT STORY COMPETITION

What is the short story competition?

Back in 2020 The Royal Mint Museum launched its first short story writing competition to mark the 50th anniversary of the UK's change to decimal currency. It was the first time we'd run a competition of this type and we were keen to help promote and celebrate literacy. We decided to make the competition open to all children aged between 9 and 11.

It was such a success that we decided to make it an annual event, changing the topic every year. The focus this year was the Queen's Platinum jubilee.

What happened this year? Over 550 young people took part in this year's competition, which celebrated the Queen's 70-year reign. We had an expert panel of judges including celebrated children's authors and illustrators.

It was a tough decision to choose an overall winner as the standard was very high this year, but all the judges loved Joshua Boholst's story about a spider who lives in Buckingham Palace.

After the judging had taken place we held a special online award ceremony at the school, which was attended by competition judges, the team from the museum and Joshua's family, teachers, and friends. Four runner-up prizes of Platinum Jubilee commemorative coins and a set of books were also awarded to Emily from Hamilton College, Motherwell;







Contact:

Competition details and information on how to enter can be found on the Royal Mint museum's website royalmintmuseum. org.uk or register your interest early by emailing storycompetition@ royalmintmuseum. org.uk

Yuvraj from Hendon Prep, London; Isobel from Wells Primary, Essex and Harriet Hodges from Baden-Powell & St Peter's Church of England Junior School, Dorset. A number of special commendation prizes of brilliant uncirculated coins were also awarded.

What is the competition prize?

There is a special prize on offer to schools entering their pupils of a £5,000 investment in the school's library. The winning writer has their story illustrated by a professional artist and receives a set of Royal Mint commemorative coins.

There are also nine runners-up prizes up for grabs, and all the selected stories are published on the Royal Mint museum's website. The competition is running again in the next academic year, and details will soon be announced on the museum's website.

Can individuals enter, or does it have to be a whole class?

Yes, we welcome entries from individual pupils as well as whole school participation. The competition doesn't have to be run as a class activity, but we provide lot's of additional material via our website to help teachers plan a lesson around it.

We also accept entries from home-schooled children where they can donate the cash prize to a public library of their choice.

WHY SHOULD YOU ENTER?

- · You could win prizes including a £5,000 investment for your school library
- The competition helps to promote and encourage literacy within your school
- The Royal Mint Museum can help support the running of the competition boost for pupils with our web resources and virtual lessons
- · It's a great confidence who have their story shortlisted



Excellence in teaching reading, writing and oracy

BEST BOOKS FOR SCHOOLS

The go-to specialist online book shop for schools, with expertly curated collections to support CURRICULUM TOPICS and READING FOR PLEASURE

bestbooksforschools.com



- Flexibility to purchase your own book choices
- One-click purchasing of curated packs to save time
- Competitive prices on quality books ensuring best value
- FREE delivery on all orders placed with a value over £10

BEST BOOKS FOR SCHOOLS is the bookshop of **Just Imagine**, home to **Reading Gladiators** and **Take One Book.** To find out more about Just Imagine and our reading initiatives, visit: **justimagine.co.uk** or email: **assistant@justimagine.co.uk**



- On Multi-lingulism/ EAL/ self-efficacy
- Wider perspectives on language learning
- Free for all to attend
- 20th-24th June



SCAN ME

https://primarylanguages.network/virtual-conference-2022

UNDERCOVER TEACHER

Our anonymous educator gets something off their chest

Happy education stories don't win votes for politicians, but schools are doing amazing things

was asked to write about something that had been bugging me to do with education. Let's be honest, there is plenty I could have written about. It seems there is a lot to get us down, a lot to annoy us and a lot to concern us. In many corners of the sector there is a collective funk of worry, cynicism, fear about the future and, above all, exhaustion. The 'getting back to normal' narrative is, at best, a distraction, and at worst plain dangerous. It creates a misguided view of schools and education for the wider population and an expectation that some organisations are in no position to meet. But I'm not going to write about that.

Here's the thing. At the moment, I think we are getting too bogged down in what is bugging us and I am as guilty of this as anyone. We must resist the urge to get pulled into a downward spiral. It is time to think differently, to be proud, and to recognise all the good we do and the difference we make.

Go back to the start. Why do you do what you do? What made you want to step into the classroom

in the first place? The answer is undeniable. Even those among you who might give a wry smile and say 'holidays' are not being entirely honest. The battle-weary who might claim they can't remember are deceiving themselves. We all did it for the same reason. To make a difference, to help, to inspire, to change lives and to give children the knowledge they will carry for a lifetime. That's why we do it. That's why the best part of the job is the bit that happens between 9am and 3:30pm. In my career so far, I've never met a teacher who told me they preferred devising to delivering, laminating to leading learners, or marking to making children better versions of themselves. We do those things to enable the best bit - working with pupils and making them better than sometimes they ever thought

This is why we must be proud of everything we have done and will continue to do, despite the struggles of the last two years and those that are still to come. Schools are doing amazing things in massively challenging circumstances, but that is never reported, and I don't think it ever will be - happy education stories don't win votes for politicians. I often tweet 'headlines we'll never see'. The cynic in me sees the mainstream media's consistent takedown of schools as a wider agenda to fracture the education system. Take

> the 'catch-up' conversation; media stories weren't about how schools had worked to make the gaps as small as possible, but how big they were. The return to school was overtaken by conversations about whether kids should be vaccinated and forced to test, rather than schools making the whole process smooth and effective. Don't even get me started on the awful, untrue, and libellous comments from

always been hard, and it

"We must resist the urge to get pulled into a downward spiral." actual government officials. Teaching is hard. It has

> certainly isn't getting any easier, but at the bottom of it all we are still making a huge difference to every child we come into contact with. Those things that bug us can seem huge and at times insurmountable, but what we do every day and what we give the pupils in our care can put those bugbears into perspective. Every now and again, we have to re-centre ourselves in our 'why' because it's easy as a teacher to feel like you are drowning in work and having little impact. But if you only do one thing today, please remember that:

Every day you help.

Every day you inspire.

Every day you do more than you'll ever know.

Every day you make a difference.

And while you might hear it rarely, every day hundreds of children and adults are so pleased you did. TP

The writer is a headteacher in England.



Share your classroom stories. TO WIN EDTECH PRIZES

Schools from across the UK and Ireland are being given the chance to win premium edtech prizes in return for sharing their most passionate, innovative, and imaginative classroom stories.

Organised by global education technology company Promethean, the annual Classroom Stories competition invites schools, teachers, and ICT managers, to share their exciting stories by submitting a two-minute video. Valued at around £3,000 each, the prize packages include an advanced ActivPanel interactive display, installation, training, and support. Promethean is offering 20 schools the chance to win, with a guest judging panel ready to view this year's entries. Guest judge, Jim Wallis, Head of UKI at

Promethean, explains why he is excited

to see Classroom Stories return: "We continue to be amazed by the stories and experiences that schools share. There's so many innovative ideas, and entries are always full of enthusiasm and passion. It's a real opportunity to celebrate education and the people who create inspiring learning opportunities every day. I can't wait to see what this year's nominations have in store."

The Classroom Stories competition is open for entries from now until Friday 24th June 2022, so if you've got an inspiring story - get ready to share



IT'S REALLY EASY TO ENTER...

Learn more:

www.prometheanworld.com/gb/ microsites/classroom-stories

HAL LEONARD'S ESSENTIAL ELEMENTS

Music Class

The exciting, new online solution for primary-school music

Over 500 of the world's best-known songs from pop, film, and musical theatre for choirs, assemblies, and classroom music lessons











Interactive Classroom Tools

- · Virtual Music-Book Library · Classical Listening Maps
- · Personalised Classroom Playlists

Popular Song Learning Resources

- · Lyric Videos
- · Demonstration Tracks
 - · Backing Tracks
 - · Teaching Resources
- Interactive Videos

Classroom **Music Lessons**

- · Fully Planned Lessons for Years 1-6
- · Whole-Class Instrumental Methods

Out Now! Sign up for a 30 day free trial at www.eemusicclass.co.uk

*Terms and conditions apply

Sarah Mullin VOICES



LET'S EMBRACE FLEXIBILITY AT WORK

7

@MrsSarahMullin

The pandemic has given us a chance to see what's possible, and we can't go backwards

ithout a doubt, teachers and education staff are the unsung heroes in the country's response to
Covid 19, swiftly adapting our practice to meet the challenging times in which we found ourselves living. Whether it's streaming live lessons to pupils at home, caring for the children of key workers, or hosting parents' evenings over Teams, teachers continue to go above and beyond to educate the nation's young learners during an unprecedented global pandemic.

Lockdown taught us to appreciate the little things in life: the beauty of a sunny spring morning (a chance to go outside!), the importance of prioritising our health, and the joy of a slower pace of life, devoid of unnecessary materialism. But the pressures of this challenging time have left increasing numbers of education staff wondering whether they can continue in the jobs they love to do. Teaching really is the

best job in the world, but it is far from easy. With increasing numbers suffering from stress and even burnout, it is important that the education sector embraces flexible working practices in schools, now.

As a parent of three young children, I am a huge advocate for flexible working, in which schools offer some stretch as to when, where and how staff carry out their duties. Being a parent is such a blessing and incredibly rewarding, yet we live in a society where parents are expected to work as though they do not have children, and raise children as though they do not work. And this is by no means only true of those of us with kids, either; so many aspects of our personal lives can be shoved to the sidelines in the name of The Job. This often leaves us with a sense of perpetual guilt as we juggle our multifarious personal and professional responsibilities.

But it doesn't have to be this way.

I'm a part-time leader, so I can work in a fantastic school while also pursuing my career goals. On my days off, I am able to engage in outreach work with other schools, contribute to education books, journals and articles, offer coaching for aspiring women leaders, and present at national education conferences, events and workshops. I have also been able to study for a doctorate in education, something I would have found incredibly challenging to manage if I hadn't had some wriggle room from my school.

In a sector where there is a longstanding recruitment and retention crisis, it is important that senior leaders really consider mutually beneficial ways to make the workplace more inclusive. There are many excellent practitioners

who would gain from having the option to negotiate their contracts for a whole host of personal and professional reasons. Flexible working also allows schools to recruit and retain experienced, skilled, hard-working and loyal colleagues who might otherwise be lost to teaching. This can in turn lead to increased staff retention, better job satisfaction and higher levels of wellbeing.

From an organisational perspective, it is understandable that the thought of flexible working might initially seem a little daunting. Unlike other industries, schools are faced with obstacles such as timetabling constraints, budgeting issues and preconceived ideas about how they 'should' operate. But flexibility doesn't necessarily mean just offering part-time working arrangements. There are many possibilities as to how staff and schools might work together to reach a symbiotic relationship. Practices might include offering compressed hours or flexi-time arrangements. Schools could consider the option of allowing some work to be carried out remotely, such as permitting PPA time off-site. Job-sharing options are a great way to ensure pupils have consistency, and co-leadership allows schools to retain highly qualified and experienced staff who might otherwise be discouraged from applying for a senior position.

Flexi-working might also mean offering phased retirement routes so that schools can retain devoted, skilled professionals. With growing numbers

of staff seriously considering their futures in teaching, the possibility of career breaks might provide valuable time for educators to rest and reflect so that they can make informed decisions about what their future career choices might be. The fantastic thing about flexible working is that it does not need to be forever. As the requirements of the member of staff or school change, so too might the arrangement; it can offer a temporary solution that is mutually beneficial to both the school and its employees.

The global pandemic forced us all to adapt to the times we found ourselves living in, and now it is time to consider whether we really want to go back to the way things were. We need to reflect on the opportunities this unique time presented to us, and embrace flexible working practices in our schools. TP

Sarah Mullin is the executive headteacher of a primary school and nursery in the West Midlands.







childcare & EXPO

BOLTON WHITES HOTEL 17TH - 18TH JUNE 2022

CBS ARENA 23RD - 24TH SEPTEMBER 2022





Join the magic at the home of early years and primary education inspiration! At three locations across the UK, childcare professionals can discover exciting activities, new ways to improve their practice and countless opportunities for learning, fun and development! Plus - meet special guests such as Alistair Bryce-Clegg and Dave Benson Phillips!

CPD SEMINARS & PANEL DEBATES

FREE HANDS ON WORKSHOPS

SHOPPING VILLAGE & EXHIBITION INTERACTIVE FEATURE AREAS

Find out more at www.childcareeducationexpo.co.uk



t's that time of year again, and with the end of term coming up, who doesn't want a treat, some fun learning resources, or free materials to increase pupil motivation when learning science?

Yes, that's right! We're giving away a £100 surprise hamper of delicious treats (containing a big chocolate basket, sweets, savoury snacks and drinks) as a first prize.

Plus, we're including a boost to keep everyone motivated. We know your children (and

even you) would like some fun as the days get longer. That's why we're offering five 60-day trials to Tigtag and Tigtag Jr as second prizes... and not just for you – for your entire school!

Finally, we'd like to make your class even more colourful and motivate pupils every day to get interested in science. Our third prize, for five lucky teachers, includes a calendar with science dates to celebrate, a colourful periodic table, and even some organisers for you.

What's on offer at



- First prize: £100 hamper of delicious treats
- Second prize: Five 60-day trials to Tigtag and Tigtag Jr for your whole school
- Third prize: Printed materials for five teachers and their classrooms
- Winners who enter by email will be chosen randomly

For more information visit twig-world.com

Enter now at teachwire.net/giveaways



DEBORAH HERRIDGE

n this unit children will identify and name common types of natural and synthetic materials, including wood, metal, plastic, rubber, fur and nylon. They will describe the physical properties of everyday materials and use these to group together objects. They will state that different materials can be made into the same object and say why some materials are unsuitable for some objects. Pupils will research newly invented materials and think about their useful properties, and, working scientifically, will test them. This unit builds on any work children have done in the Foundation stage where they have observed and handled different materials in their immediate environment.

FREE ACCOMPANYING RESOURCES... Download your free worksheet pack at tinyurl.com/tp-KS1materials What does the gr Which is the most absorbent material? Which is the least absorbent material? Which is the least absorbent material? Which material absorbed no water? Which material absorbed mo water? Which material absorbed mo water? Which material absorbed no water? Which material would you choose to mop up a bicycles • Called a *bonechaker* because it was no unconfortable. (1865) **Modern racing blake (2030). Extremely light. DOWNLOAD RESOURCES AT

WEEK 1

Learning objectives:

• To identify and name a variety of everyday materials.

••••••

To sort materials into groups.

Start the lesson with a treasure hunt! Give each pair of pupils a matchbox or a small bag. Explain that they are going on a materials hunt around school. They have 15 minutes to find as many different materials as they can and to collect samples that can fit into their box. At this point don't explain any definitions of 'material' other than it's something that objects are made from. Give some examples to start the children off, e.g. "In my matchbox I have a paperclip made of metal, a hair clip made of plastic," and so on.

Once the pupils have completed their collecting, share their finds and discuss what a 'material' is. Explain that in science we use the word for more than just fabrics, and that everything around us is made from materials. Ask how many they can name – take ideas and list these on a flip chart. Add to this list as new materials are learned. It is worth noting that liquids like water are materials too, but probably not sensible to include in your matchbox.

Now ask students to sort their collection into groups of their own devising – this will form the basis of your initial assessment. Take a photographic record of how they have grouped their samples.

Ask the students to keep their matchbox of materials in a safe place, as we will be adding to the contents each week (remind them) and revisiting the treasure hunt later.

Assessment:

How children sort their collections is suggestive of how they conceive of the concept of 'material'. Have they grouped particular sorts of materials or objects together? Can they explain their choices to you and to each other?

WEEK 2

Learning objectives:

- To distinguish between an object and the material from which it is made.
- To know that materials have different properties.

Remind children that there are many different kinds of materials and that each has a name. How many do we know? Quickly take some ideas to help the class remember the concept.

Now play a 'Simon Says' type of game to revisit the idea more thoroughly. Ask the students to, for example, touch something made of metal, something made of cotton, or an object made from more than one material, etc.

Point out that all objects in the classroom are made of at least one material. For example, a ruler is made of plastic, and a book is made of paper. Some objects are made from more than one material – can they suggest some examples? (E.g., scissors with metal blades and plastic handles, a chair made of plastic with metal legs etc.) At this point start to introduce words that can describe the properties of materials, e.g., "Touch something made from a material that is hard," or "bendy," or "smooth," etc. Keep the pace brisk.

Ask pupils to complete the **objects** and materials handout (see download). Try to maintain the speech pattern 'an object made from …'. This helps establish the difference between an object and the material from which it is made, so 'a ruler made from wood' rather than 'a wooden ruler'.

Discuss the idea of a 'property' and explain that this means what a material is like; it might be hard, soft, bendy, rigid, transparent, rough, smooth, prickly or waterproof. Do a couple of examples together then let pupils continue on their own. Expect more able children to demonstrate mastery

of a more sophisticated vocabulary and encourage this.

For the second part of the lesson, use the materials die to determine how to construct the materials monster. Get pupils to throw a pre-constructed die to determine what type of material to use to complete a collage of a monster. For this activity you will need craft materials of differing textures with different properties, such as shiny foil, fluffy fur fabric, rough sandpaper etc. Once completed, children should label the different parts of their materials monster with words that describe a property of each material they have used.



Check for understanding that pupils can accurately name some common materials and use familiar terms to describe their physical properties.

•••••

WEEK 3Learning objectives:

- To understand that a property of a material determines how it can be used.
- To identify the properties of some common materials.

Use the class' 'materials monsters' to recap on the key terms of 'material' and 'property'. Point out one monster part and ask students to identify the material that has been used, then ask for a word to describe it. Now ask for a different word to describe the same material. Emphasise that materials don't always just have one property.

•••••

Show a selection of images on an interactive board, or bring in objects and ask children to name the material and then to think of at least two properties (see part one of the materials Powerpoint). Collect words to describe the properties of the materials as you work through the images.

Now tell the students about your neighbour, Mr Silly. Explain that Mr Silly very often makes poor choices and lives in a house full of things made from very silly materials. For example, he has a bed made of spiky nails and his kitchen has cupboards made of jelly! Ask why these materials are silly, and why they're not suitable for the objects.

Go through some examples, e.g. explaining that a bed, although needing to be sturdy, also needs to be soft, warm and comfortable, and nails are none of these things; they are cold, hard and painful to lie on. Ask the children to discuss ideas for the most unsuitable materials for objects in a house and to draw and label at least one example for Mr Silly (see Mr Silly's House



worksheet). More able pupils can write a sentence explaining why the material is unsuitable for the object. Less able learners might write some words to describe the properties of their silly object. Support by playing a game of 'Silly or sensible' and note whether children can articulate reasons for sensible and silly materials choices.

Go back to the materials PowerPoint and run through part two, this time asking children to think of the most *important* property of an object's material. Pupils often find this difficult so you may have to scaffold heavily, for example with the plastic bottle you might say "Would it make a difference to how well the bottle held water if it were a different colour or if it wasn't transparent?".

Assessment:

More able children will be able to discuss why a property of a material makes it suitable for a particular purpose. Less able children may be able to name some properties of materials.

WEEK 4

Learning objectives:

- To know that some materials occur naturally and some are human-made.
- How to research new synthetic materials.

Bring in some spoons, each made from a different material, e.g. compostable wood, plastic, metal, etc. Ask the students why the spoons are all made from different materials. Elicit that each material suits a particular purpose of the object; in this case we might want a metal spoon for frequent use at home, as it needs to be durable,

washable, re-usable, strong and so on. We might want a plastic spoon to take on a picnic perhaps, as it is lightweight and not expensive if it gets lost or damaged.

Explain that for a long time, people only used metal or wooden spoons because plastic hadn't been invented (the first modern plastic was Bakelite, invented by Leo Baekeland in 1907). Before synthetic materials like plastic, objects were all made from natural materials such as plants (like wood, cotton and linen), came from animals (like fur or bone), or they came from the earth, (like metals and clay). People thought plastic was a fantastic invention; a new material that was cheap to produce, could be made into all sorts of shapes, and used in all sorts of ways. It's only now that we are thinking of the drawbacks of using too many plastic products in that they don't biodegrade quickly.

Next, as a class, start to classify whether objects are made from synthetic or human-made materials (try to avoid the term 'man-made' – women make materials too!) or from naturally occurring materials. Make two lists on the board and add the names of objects and materials as you discuss.

Run the **old and new materials slide show** and discuss how new materials have been invented by scientists to improve on the qualities of the natural versions they replace. For example, stretchy, easy to care for, lightweight lycra means that gymnasts are not restricted in their movements.

Talk about how the newest
materials now often react to a
stimulus – they change when they
are heated or when they get wet.
There are dyes that change colour
when they are heated (think of colour
changing mugs and thermochromic baby
bath toys), plastic beads that change colour



Award-winning online tool to help identify learning difficulties and behavioural difficulties for ages 4–16



£211+VAT
1-year
subscription

"SNAP is simple, accessible for anyone to use, gives SMART targets to move towards and is helpful for putting evidence together for my support plans and EHCP referalls – I have recommended it to other schools in my cluster."

Staincliffe CE Junior School

Assess



Online questionnaires to help identify 20 specific learning difficulties and 17 social, emotional and behavioural difficulties.

Plan



Instant online reports show a pupil's strengths and weaknesses at a glance.

Do MUNICIPAL SKNAP



Interventions and strategies are suggested to be used by teachers in school and at home by parents/carers.

Review



bett

FINALIST

Reassess to track a pupil's progress and demonstrate the impact of chosen interventions.

Learn more at Risingstars-uk.com/snap22

RS*ASSESSMENT

Do you need primary science support?

The Primary Science Teaching Trust provides a termly magazine for anyone interested in primary science





Why Subscribe?



FREE and delivered termly to your inbox



Offers practical support



Keeps you updated with science news, research and projects



Registered Charity Number: 1190196

pstt.org.uk





FEATURES PLANNING



in sunlight, paint that becomes transparent when it gets wet, breathable fabrics that become waterproof when it rains, and plastics that change colour after a certain date, showing when food might be spoiled. Can children invent a new material? What properties might it have? What will it be called (many materials are named after their inventors). How will it be used? (My new material worksheet).

Assessment:

Students complete the **natural or synthetic materials** worksheet. More able children can make their own lists.

•••••

WEEK 5 Learning objectives:

• To investigate which material is best for a particular purpose.

.....

To carry out a simple test.

Ask pupils if they any have young siblings at home. Talk about how they need nappies, and show examples of a traditional cloth nappy and pin, and a modern disposable nappy filled with super absorbent polymer gel – this material was invented in the 1960s but it wasn't until the 80s that it was put into nappies. Before then, nappies could be

made from a cotton wool type of material or even just paper. For added engagement, tell students about astronaut nappies! Space suits are cumbersome and take a long time to get into and out of, so astronauts wear a maximum absorbency garment (MAG) like an adult nappy, in case they need to pee in space. All nappies do the same job and cloth is coming back into fashion – but which does the job best?

How can we find out which is the most absorbent material for a nappy? Explain that 'absorb' means to soak up a liquid. Now show the **Bilal and Suki's investigation**PowerPoint to stimulate discussion on how to conduct an investigation.

It is worth reminding ourselves that there are no hard and fast rules about how to achieve this comparative test and the act of discussing 'how we can find out' is as important as the result. What should be emphasised, however, is that the only thing we change in a comparative test is the material we're testing - so in this case the 'nappy' material. Everything else, including the size and shape of material, should stay the same. The thing we need to measure is the volume of water that can be absorbed by each material. In this key stage we might look at measuring in non-standard measures, 'bottletop-fulls' or 'pipette-full' for example. Ask pupils to predict which is the most and least absorbent material before they begin and justify their choice.

It may be that the discussion and testing may take up a whole session, so expect to continue the investigation into a second lesson. For a full investigation, this is entirely appropriate but try to keep the sessions as close together as you can.

Talk about how to present your

results. This may be in the form of a two-column table followed by a simple bar graph (see the **Investigating absorbency worksheet**) or children might choose to write a report or present their findings pictorially or photographically.

Assessment:

Can children recognise which variables in a comparative test to change and which to keep the same?

WEEK 6Learning objectives:

- To present data effectively
- To group and sort materials in different ways

.....

In this lesson, we may continue to discuss our comparative tests and consolidate all of the knowledge we have gained. It is not necessary to 'write-up' the investigation, but using the PowerPoint Bilal and Suki's investigation may help to remind pupils of what they were trying to discover and how best to present their results. More able students may like to create their own graph.

Remind students of all the materials they have encountered in the past few weeks. All have different names, and all have slightly different properties. Play **Give one take one** where students have to circulate and give one new fact about what they have learned during the topic to a peer, and learn one new fact. Do this a few times and share results.

Finally, retrieve the matchboxes of materials from week one, to which pupils have been adding new materials each week. Ask the children to group the materials as they want. How do they group them compared to last time? Discuss the different ways materials could be grouped and sorted.

Assessment:

Compare grouping and sorting to week one and note any changes, particularly in appreciation of the properties of materials and an understanding that materials can be grouped by properties, origins or uses.



Deborah Herridge is the primary science subject lead for ITT at Northumbria University in Newcastle. She is the author of the Science Bug scheme of work,

Explore Science scheme and author and editor of Cambridge International Science scheme.









5 Ways Tigtag Can Improve Engagement and Assess Understanding

If you're a teacher, you probably already know that your students learn in different ways. It might seem obvious – you need different resources to make them engage with what they are learning!

We've put together some tips to help you out...

1. Use video content to encourage engagement

Tigtag's films are best used for explaining key ideas and concepts. Incorporate these in the first half of your lesson, ideally after an introductory discussion where you assess what students already know.

2. Use videos to check understanding

Tigtag's context films help to anchor concepts in the real world. Once you have watched and discussed the curriculum film (and perhaps done some other activities), move on to the context film. This will open up further discussion and allow you to check if students really understand how concepts apply in real life.

3. Set practical activities as homework

Ask your students to try the Tigtag activities at home and come back to the next lesson ready to share their results. This is a great way to engage your students and make them feel more involved in what they're learning, while also giving you a chance to assess their understanding.

4. Make use of quizzes and review questions

Tigtag content comes with ready-made quizzes and review questions that are designed to assess and extend learning.

5. Self-assessment and assessment

Tigtag's Tidbit films are ideally used toward the end of a topic, with interactive games and activities that help you assess what students have understood, such as "True or False" and "Odd one out".

At the end of a lesson or session, ask your students to assess their own learning using the key learning points.

For your whole school

Do you want to discover how to increase engagement with your class? Why not try a 30 day trial with Tigtag? Sign up and try it out for free today!



Diving into FRESHWATER

This precious natural resource is a timely topic for cross-curricular learning, says Catherine Barr...

CATHERINE BARR

il. Gold. Water. The most treasured natural resources on our planet. All play a critical role in our human story. Oil and gold are arguably more distant for children - part of the grown-up world - but water is different. From brushing their teeth to bath time, drinking, eating, wearing clothes and flushing the loo, children can feel, touch and hear water in their everyday lives.

In school, children learn that water means life, but they may be unaware the developing freshwater crisis, the impact of which will be global. This is the focus of the United Nation's Water Action Decade (2018-2028). Drop by drop, the choices children make about how they use water over the next six years and beyond will make a difference. But rather than red-flag disaster, I hope education around the issue will ignite playground chatter, prompt questions and inspire take-home facts that will help make positive changes.

From science to geography and maths, English to art, music and PHSE, freshwater opens numerous opportunities for the classroom. Think science experiments, outdoor learning, exploration of the diversity of life (see Sir David Attenborough's new Green Planet episode on freshwater for inspiration...), creative writing, nature observation, report writing, and topical classroom debate in global

culture, human rights and the environment.

Back to the source

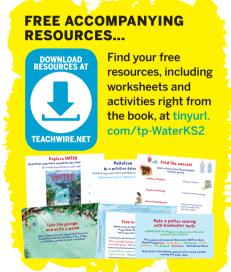
In terms of information literacy, we can also use freshwater as a topic to encourage children to think about how our understanding of science might change as new evidence emerges. From evolution to the origins of the universe, talk about how scientific debates are altered by expanding knowledge of nature and space. Help pupils make the link between research led by global scientists, and their own scientific class work observing, collecting evidence, sharing results and drawing conclusions.

Bring the water cycle to life

The water cycle provides plenty of scope for hands-on science. Simple experiments can demonstrate the movement of 'green' water in plants, explaining the processes of photosynthesis and transpiration. For example, get pupils to observe what happens when you put carnations or celery in water with some food dye. They can watch the petals or celery stalk change colour over time as the dved water moves through the plant. You can follow up this experiment in books by creating labelled diagrams, and exploring how other conditions such as light and temperature can help keep plants alive and healthy.

Why not include maths skills by exploring the percentages of water in different living things, including us! Try asking children to draw pictures representing the amount of water in different organisms. These could include a picture of a tree (around 75 per cent water), a watermelon (around 91

per cent) and even themselves (about 65 per



cent). They could also make a bar chart showing these numbers, and include the total percentage of freshwater on the planet (only three per cent is freshwater; the other 97 per cent is salt water!).

Shine a spotlight

Freshwater also provides a springboard to develop debating and literacy skills. You can bring stories alive by creating a news piece about a village where the river has run dry. What information do we need to understand the story fully? How can the pupils put facts in context to provide a realistic and accurate representation of the issue? TP



WATER: protect freshwater to save life on earth, by Catherine Barr and illustrated by Christiane Engel is available now (£12.99 HB, Otter Barry Books).

The book is endorsed by global charity Frank Water (frankwater.com), which is benefiting from copies sold.



@catherine_barr



catherinebarrbooks.me

Learning CURVE

Forget libraries, think marathons - the way we acquire knowledge might sound counterintuitive, but trust me, it works...

SARAH COTTINGHAM

eaching is rewarding but it's also really hard. There are many things that make it so: you have to attempt to keep a group of young people engaged at all times, and somehow see what's going on in their heads, to name just two! But there's another reason why teaching is difficult: learning is mysterious.

Recently, I've been collating concepts about how people learn that go against what you might intuitively think. They add to the wonderful complexity of teaching, but they can lead you down the wrong path, too. Once you know about them though, you can use them to make better decisions about how you teach.

Let's take a look at four counterintuitive concepts about learning and what they might mean for our practice.

Don't do as the experts do

It seems sensible: if we want pupils to develop their expertise in an area, we should get them to mimic the thinking and behaviour of experts. But the clue here is in the word 'develop'. There's no shortcut to expertise; children have to steadily accumulate knowledge and skills through practice.

What's more, the activities pupils need in order to develop this expertise often look nothing like the final product. It's like training for a marathon. You don't start by running 26 miles every weekend. You eat right and sleep right; do short, fast runs

and slower, longer ones. It's only after all this that anything close to a marathon becomes possible.

On the face of it, the slow growth of expertise might seem a bit demoralising: it's a long slog to become an expert. However, I think it can be seen in a positive light. For example, when you model a skill, be transparent about the road you took to get there. Sometimes, if you make modelling too seamless, children may find that when they try it for the first time, they inevitably

"There's no shortcut to expertise; children have to steadily accumulate knowledge 2014. Impair and skills through practice"

> struggle, and assume they're just 'bad' at it. Continual emphasis on the growth of expertise as a slow process of accumulating knowledge and experience is an important lesson.

The illusion of performance

It's really satisfying to teach your class something, and then when it's time for them to do it independently, they seem to be tackling the task really well. This is what we call performance. It indicates that pupils are grasping some of the stuff you've taught them. But performance can be deceptive. It may actually have

very little to say about children's learning.

How can this be? Well first off, as we have already said, learning is a process. If we think about it as stabilising memories, this happens in the brain through something called consolidation. Memories start off fragile and then, with rest and sleep, they consolidate. Since periods of rest and sleep tend to happen outside of lessons, we are unlikely to see the full learning cycle in a classroom.

> Secondly, there are activities that actually impair pupils' performance in the short term, vet improve learning in the long term (Bjork & Bjork, performance to improve learning: it doesn't get much more counterintuitive than that! One such activity is retrieval practice. This

is the use of low-stakes questioning so pupils have to recall answers from memory. This is harder for pupils to do than giving them the answer (either verbally or to re-read) and so it impairs their initial performance. However, retrieving from memory triggers some powerful processes in the brain that speed up long-term memory storage (amongst other fascinating benefits).

Pupils don't learn what you teach...

For a long time, I thought of memory as a library: we shelve new information; we check it out when we need it, then slot it back in. Yet my pupils often didn't absorb the 'meaning' of what I was trying to teach them, and different children found different meanings in the same material. Memory, it would seem, is not like a library at all.

A better metaphor is an ecosystem: complex, competitive, intertwined and always active. When we teach pupils something, they understand it in relation to what they already know.





Pupils don't learn what you teach; they learn their interpretation of what you teach.

The best thing you can do is deliberately activate the prior knowledge to which you want pupils to connect the new information. This isn't easy as children are likely to have different levels of prior

understanding, but you can check this through

careful questioning, and having some simple, familiar concrete analogies and examples for a new concept can be really helpful.

Knowledge underpins skills

When we think about what we want for pupils academically, it's often related to the skills we want them to have. For example: critical thinking, creativity, ability to infer deeper meanings from the books they read, etc. It's really easy to fall into the trap of thinking these skills can be taught generically. What I mean by this is teaching lessons where pupils practise 'inferring' or 'evaluating' independent of the important content we want them to engage with. For example, I used to give my pupils grids of pictures and have them practise 'inferring' what was happening.

But we can't divorce the skill from the knowledge. There's no generic area of the brain that 'evaluates'. We evaluate something using the knowledge we have about it.

To illustrate this, try answering this question:

Which character in An Inspector Calls is most to blame for Eva Smith's death?

If you know a lot about the play, then you might have come to a pretty nuanced conclusion, apportioning varying levels of blame to different characters, perhaps factoring in how guilty they each felt at the end of the play in addition to their actions. If you know very little about it, you fell at the first hurdle and couldn't evaluateat all.

You might argue that pupils benefit from learning generic steps about how to carry out the skill, e.g. 'when evaluating, list the pros and cons'. This is true. Knowing what it means (generically) to evaluate/analyse/infer, etc. is clearly necessary. But this gets you only so far. If you don't know much about the topic, you don't know any pros and cons to list!

So, how do we develop pupils' skills? We need to appreciate that knowledge comes first. Before learners can apply what they know in different ways, they must have something to apply. Only then can they use a skill is to practise parsing the knowledge they have.

These counterintuitive concepts have the potential to be pernicious. They can lead us down the wrong path in our teaching. By exposing them, by learning more about them and what they mean for our teaching, we can work with the way pupils learn instead of against it. In other words, we can use these counterintuitive concepts to make better decisions about how we teach. TP



Sarah Cottingham was an English teacher and now works as a teacher

educator working on the NPQs and supporting schools with their professional development. Sarah recently completed an MA in educational neuroscience.



@overpractised

overpractised.com

SENCO HELPING YOU TO SUPPORT EVERY CHILD

Collaborate and LISTEN

Find more at TEACHWIRE.NET Are you new to the classroom and not sure how to work with your TA? Sara Alston shares the dos and don'ts you both need to thrive



Extended breaktimes How neurodiverse learners have benefitted from

more playtime at Whitefield Primary...

Read it at tinyurl.com/tp-Breaktimes



Support EYFS maths

Development Matters 2021's approach to number benefits SEND pupils, says Liz Hawker...

Read it at tinyurl.com/tp-DevelopmentMatters



Balance SENCo workload

Michael Rogalski shares what he's learned on how not to blow a gasket...

Read it at tinyurl.com/tp-SENCoWorkload



REQUEST YOUR FREE COPY



Our sister title SENCo provides useful ideas, practical guidance and thoughtful insights into SEND provision. Request your free copy at teachwire.net/free-senco

or many early career teachers (ECTs), the biggest challenge is not managing the children in their class, but the adults. Faced with a TA with more classroom experience who is often several years their senior, then being expected to direct and deploy them effectively can feel like an overwhelming task.

There is an implicit belief within schools and teacher training that those who can manage a class of children can also manage an adult, so there is little, if any, training on TA deployment. Equally, the statutory guidance provides minimal further information:

Deploy support staff effectively.' (The Teacher Standards (2013)

'Teaching assistants (TAs) can support pupils more effectively when they are prepared for lessons by teachers, and when TAs supplement rather than replace support from teachers.' (The ITT Core Content Framework 2019)

Build effective working relationships by seeking ways to support individual colleagues and working as part of a team.' (The Early Career Framework 2021)

'Teachers are responsible and accountable for the progress and development of the pupils in their class, including where pupils access support from teaching assistants or specialist staff.' (SEND Code of *Practice para 6.36 2015*)

This feels like quite a lot of 'what', but little of 'how'.

The key to effective TA deployment is communication and relationship building. But this is difficult as there is little time available - many TAs work only school hours, plus 15 to 30 minutes if we are lucky. The situation is

exacerbated as many TAs have little formal training and there are no clear expectations or career structure for the TA role.

Yet, we know that TAs can play a vital role in supporting children's learning and promoting their wellbeing, so we need to make this work. There are several key things you can do to make this easier:

Accepting your leadership role

The guidance is clear that a TA should work under the direction of teacher and their role is to supplement, not replace them. Managing a TA is often an ECT's first leadership role. Recognising this, and that you need to lead a team that works together to support the best interests of the children in your care, can be very helpful. This includes identifying which individuals and groups of pupils your TA should work with, how and when.





establishing shared expectations, strategies and approaches is important and a good starting point. It can be helpful to formalise this into a 'classroom contract' setting out the roles of the different staff. This needs to be a working document and developed in collaboration with your TAs. It clarifies everyone's roles at each stage of the lesson, including before (planning) and after the lesson (feedback). It allows your TA to ask questions, make comments and suggestions. 'Class contracts' may include certain common elements across a school, but will need to be personalised for each class to meet the needs of the different children and staff. Most importantly, they will need to be reviewed and adjusted as the year goes on.

Sharing planning and feedback

The lack of time often means that TAs are on the back foot with the content of lessons and what you want them to do to support learning. As a result, many often work with the same children in the same way as this is their comfort zone. You need to find a way to share your planning and to provide space for your TA to feed back on it. Some TAs prefer to receive hard copies of planning slides that they can annotate with feedback; others like to see planning online and share feedback by email.

I use three key questions to move TAs on from 'What do you want me to do?' to more active support for learning. The answers can fit on the back of an envelope!

What is the learning intention?

Whatever these are called in your school, they are the focus of the lesson and what the children are going to learn. This needs to include enough information to be useful (e.g. not just addition, but addition with exchange using formal methods with two- and three-digit numbers), ideally wit an example.

What is the key vocabulary?

This is the new, technical, or unusual vocabulary pupils will need to access the learning. Highlight the key vocabulary on your planning and/or slides, so your TA can use it as prompts with the children.

What is the desired outcome?

What are the children expected to produce by the end of the lesson?
Consider how flexible this outcome is, so the task can be adapted to meet children's needs and different ways of demonstrating learning. This can support your TA to focus on the what is being learned, not just task completion.

Don't assume knowledge and understanding

Mind-reading is not part of the training for teachers or TAs. It is all too easy for us to assume that the reasons for using particular approaches or strategies in the classroom will be clear to our teaching assistants. This is not always true. Equally, your TA may hold knowledge about the school and its traditions, the children and their families, as well as practical things like how to mend the photocopier. In both cases, we tend to forget that what is obvious to us, is not to the other. Respecting each other's knowledge, and taking time to explain and listen can solve many problems later.

Seeking support if you need it

All relationships take time to develop and have ups and downs. Expect there to be points of tension between you and your TA, but hopefully these will be short and few and far between.

Occasionally, teachers and TAs can get to a point where one or both feel they are constantly walking on eggshells. This is not good for anyone, including the children. If you find yourself in this position, it is essential to seek help from senior staff. This is not an admission of failure or that you are not managing the class successfully, but a recognition of a reality that makes teaching even more difficult.

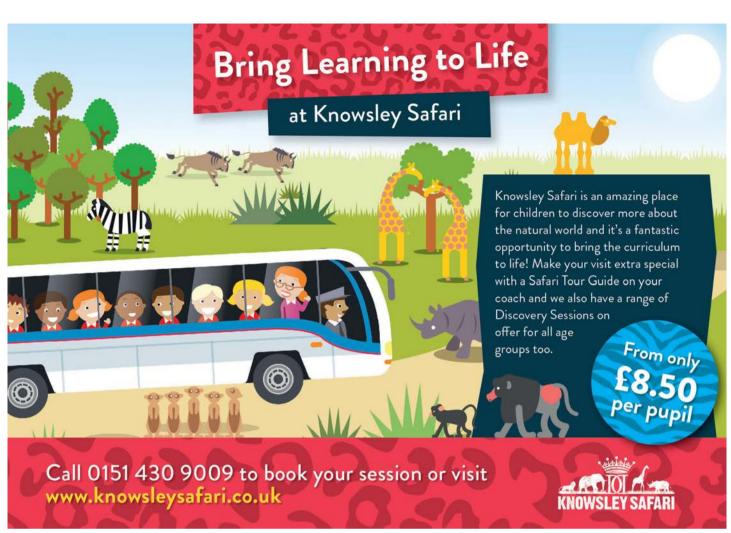
Appreciating your TAs

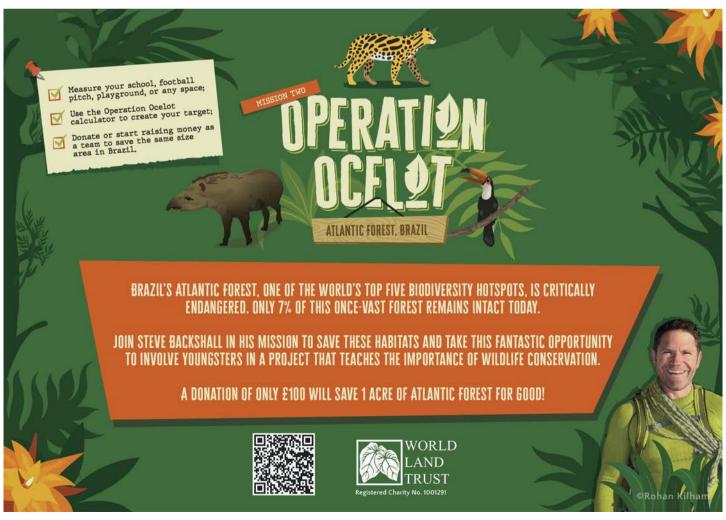
Difficulties occur when teachers don't make TAs feel valued and part of the team. TAs want teachers to ask their opinions, share feedback and know they are valued and respected. Like all of us, TAs want to know when they have done their job well. Too often praise for success in the classroom goes to the teacher and not the TA. In the hustle and bustle of the classroom, it is easy to forget to let our TAs know what they have done well. We can find ourselves in a situation where we only pick up on what our TA has done wrong and assume that they know when things are going well. A simple thank you goes a long way.

Making the teacher/ TA relationship work is about the willingness to listen, learn and work in partnership, so that you provide a consistent response to the children. **TP**



Sara Alston is an independent consultant and trainer with SEA Inclusion and Safeguarding, and a practising SENCo.







Mud, sweat AND TEARS

Pack plastic bags, and don't EVER say 'ghost': a teacher's guide to the residential

LYNDSEY FROST

he primary residential: undoubtedly the highlight of school for a lot of children. For staff? Well, it can range from sheer horror at the thought of having to tend to a class in your pyjamas, to absolute delight because you get to have a go at all the things you haven't attempted since your own residential: Leap of Faith, here I come! There is certainly a lot of fun to be had, but careful planning is a must.

Here are a few hints and tricks to make sure this milestone event is remembered for all the right reasons.

Plan of action

Covering all bases in terms of planning and preparing this military operation is

probably the most daunting aspect of organising a residential, but it shouldn't put anyone off.

These kinds of trips generally need booking quite far in advance – particularly if you have a date in mind in the warmer months. Start by gathering the information needed before any plans are shared with children and parents. Know what the content of your trip will involve and ensure that the provider sends you all necessary risk assessments – you will need these for most outdoor activities but the good news is, they've already been done for you!

Remember to also have something in place to cover any risks associated

with transport. After this comes costings: work out how much the trip will cost per child, taking into account accommodation, activities and transport. Then find out if, and how much, your school is prepared to subsidise. Keep an ongoing document to track deposits and payments towards costs, and use a cashless system to facilitate this if you want to avoid children bringing money into school and dealing with the drama when they've lost it on the playground – been there, done that!

I find it useful to make my own plan of action so I know what needs doing and by when (risk assessments, numbers confirmed with provider and deposits paid, etc.) I'd also recommend using your school calendar to display deadlines and alert you (and others involved) when the time draws near.

Next on the agenda is people organisation. First collect in your confirmed numbers of students wanting to participate and check guidance on the ratio of adults to children (generally 1:10 for KS2). You will need to know about any medical conditions, medications needed and food requirements, so ensure that you communicate the importance of this with parents and have a log of who needs what and when they need it.

Prepare to be a walking pharmacy as actual medication should be handed to staff in a clear plastic bag with name and dosage information clearly labelled. In addition to this, it is a good idea to send out kit lists in good time so parents can be prepared and make necessary purchases. As a member of staff, wet wipes and plastic bags are a must!

Be clear on expectations prior to the trip, specify what they can and can't bring (money, electronics, extra snacks) and make sure that this is conveyed to parents. Whether you use social media or your school's website, prepare a way to communicate with parents while you're there because they'll want to see photographs and know how everyone is.

Safety offsite is always a worry for staff. It is helpful to know that classes are generally broken down into smaller groups on a residential so individual staff are responsible for fewer children. I would recommend having them in pairs at all times and conduct head counts at the start and end of every activity. Know who is in every room/dormitory as there will likely be some squabbling over this and some wanting to swap halfway through after a fall out over sweets or something equally as trivial. To avoid theatrics, I would advise the tactic of allowing everyone to choose one friend they would like in their rooms and allocate based on how well you know the children and their friendship groups, but don't give them too many options - let them know which room they are

FIVE BICCUPS AND HOW TO DEAL WITH THEM!



"I SEE YOU HAD **CORNFLAKES FOR** BREAKFAST...'

There will be puke.

Even those who claim never to have suffered travel sickness before in their little lives can soon fall victim to the bumpy roads and smuggled sweets. Pack bags and even schedule a stop if your journey is a lengthy one!



"WE'RE NOT **FRIENDS** ANYMORE!"

Not really what you want

at 2am after a long day. Students still need to be aware of boundaries and consequences while away, as safety of everyone is paramount. Be restorative in your approach and allow students to resolve issues between them so they feel as though they have ownership of the decision rather than strictly 'being told'.



"I MISS MY MUM/ DAD/SISTER/ AUNTIE/CAT/ PET ROCK"

There will be moments, especially at night, when your students stop and think about the unfamiliar. In your correspondence

in once they arrive so the buzz of being there takes over.

Despite there being a lot to consider and manage before and during a residential, it is one of the most beneficial things a child can do during their school career. They get to partake in new experiences, challenge themselves and be proud of achievements that aren't just academic.

Building confidence, self-esteem and teamwork skills are all additional advantages that make the experience so worthwhile and, as a teacher, you get to see a whole new side of the children you think you know so well. You might also find that they have a newfound respect for you, unless you completely embarrass yourself by capsizing a canoe into a duck pond... yes, I did.

In the end, everything boils down to

to parents beforehand, suggest they prepare their child by giving them experiences to sleep away from home for the night to see how they cope. Allowing them to bring a soft toy is another idea for comfort. I bring one too!



"WHERE'S MY TOOTHBRUSH?"

There's always one; you probably already

know who it'll be. I like to prepare an emergency kit, just a few travel-sized toiletries. While you're at it, make sure you don't forget anything!



"I DON'T WANT TO DO IT"

Partaking in activities outdoor or otherwise - is generally the reason for

the residential. Whether out of fear, or any other upset, remind them of the experiences on offer and the pride in being able say "I did that!" New is sometimes worrying and that is okay. Get their friends on side as well if they need further convincing. A victory photo tends to work wonders too!

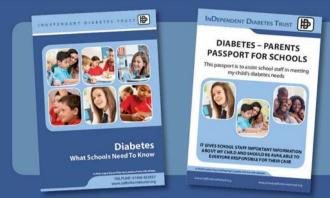
allowing children to make memories - with you and with their friends - and it is completely and utterly worth every second of planning and preparation you put in to making it happen for them.

One last thing: if you want any attempt at a full night of sleep, do not under any circumstances, mention the G word (ghost). Be brave, be bold, have fun, and bring extra coffee... just in case! TP



Lyndsey Frost is a KS2 teacher in Teesside who has organised and attended several school residentials over the years.





DO YOU HAVE A CHILD IN YOUR CLASS WITH **DIABETES?**

DIABETES - WHAT SCHOOLS NEED TO KNOW DIABETES - PARENTS PASSPORT FOR SCHOOLS

ASK FOR YOUR FREE COPIES TODAY

EMAIL: martin@iddtinternational.org or TELEPHONE: 01604 622837

InDependent Diabetes Trust P O Box 294, Northampton NN1 4XS

www.iddtinternational.org Charity Number: 1058284 Registered Number: 3148360



Dundee Science Centre inspires people of all ages to explore and understand the world around them, to discover and enjoy science, while having a fun day out.

Situated a short walk from Dundee High Street, this iconic city attraction has recently been renovated to provide even more immersive exhibitions and show stopping interactives.

- ✓ City centre location
- ✓ Lots of public transport
- Accessibility for all
- Changing places toilet
- Sensory zone
- Outdoor spaces
- Café Create
- Friendly team on hand
- ✓ Disabled parking
- Level access museum

If you are looking for a day of fun for families, schools, or community groups, whilst also learning a thing or two along the way, look no further than Dundee Science Centre.



Find out more at www.dundeesciencecentre.org.uk or email staff@dundeesciencecentre.org.uk









Stuck on the hamster wheel? Perspective and acceptance are the keys to improving your teaching and your wellbeing...

o you start each day with an optimistic outlook and end it the same way, able to reflect positively on your successes and healthily on what didn't go so well?

I ask this in my new book Independent Thinking on Primary Teaching, and it's quite the challenge. We are all aware, or should be, of the importance of personal health and (mental) wellbeing; that we should look after ourselves so we can look after others particularly the children in our care. All too often, though, the Twitterati is awash with tales of colleagues on the perennial hamster wheel of work and expectation, making the concept of answering 'yes' to my question seem a forlorn hope.

For me, the ability to reflect positively and healthily on a day's events is vital. Why is it that we agonise over questions like 'If only...', or 'Why didn't I...', and 'I should have...'? Why do those, usually infrequent, negatives keep us awake and cause us restless nights? Why don't we dream about the innumerable positive interactions throughout the day instead?

Basically, it's human nature! Our brains are hard wired to focus on negative things, a primeval instinct that kept our ancestors alive. This concept is explained in detail in *The Power of Bad:* How the Negativity Effect Rules Us and How We Can Rule It, by Roy Baumeister and John Tierney. I have used this understanding to distil five simple and effective ways that I use to reflect on each day in a positive, healthy way. Consider them, put them in your own personal toolbox and use them to make an impact your working experiences then hopefully you won't reach the end of the next half-term feeling like a worn-out rag!

Whether something has gone well, or not as you'd planned, making time to reflect is important. I have found that far too often the negative is what comes to us immediately, and so our natural fixation with it makes it predominant. However you do it - on the drive home, walking the dog, cooking dinner, sitting alone - make time to think over your day.

True, this may mean you have to force yourself to think about the positives, but give it a go. Reflecting in a rush will only lead to focusing on a few snippets, and these will undoubtedly bring the negative into focus, as we've discovered through experience!

With time, though, the positives will emanate make sure you make a note of them, mentally or in a book or computer file, for future reference. This does not mean ignoring the negatives, but rather just keeps them in perspective.

If you are going to be reflecting, I have found that it is best done with someone else. Someone you trust. Someone who will listen. Someone who will offer advice if you want it. I learned this during my time as an NOT. and nothing has hanged throughout the following 25 years. It's one of the constants of teacher life.

Having someone with whom you can talk throughout the day is invaluable, especially when it is done with no judgements attached. This allows you to unpick what happened, look at things from different angles, and to hear your thoughts, seeing what or how you could or should have done things differently. With the right person this will be a



coaching session, where they say very little, but instead give you the time and space to work things out for yourself and help you to be better prepared for the next day or lesson.

It's sad that, due to many competing pressures, schools don't seem to operate a buddy system for new staff anymore (new to the school, not just ECTs). I have always found this vital to my teaching and, if you're a leader, I'd recommend it heartily. Don't just presume that your current

staffing

"The ability to reflect positively and healthily on a day's events is vital"

structures allow for this

- consider how you can
specifically engender it
within the school culture.

3) Be more Janus

There can't be a primary teacher that hasn't been in an assembly featuring this Roman god, can there? Put simply, we need to look backwards and forwards. In this way you can take each eventuality and ensure that it is built on and/or addressed in the future.

you had a negative
interaction –
perhaps a lesson
went awry, or a
child became
emotional
– then

you know

following

be used to

that the

day can

For example, if

overcome, intervene, change and develop.
This is what makes points one and two so vital. With time and, hopefully, omeone to share

someone to share and discuss with, you will be able to look back at what has happened, but also be able to look forwards to a new day.

A good way to support yourself in this endeavour is to have a space in your planning for reflection.
Variously I have used a 'Next lesson I need to...' section in my plans, made notes in my diary or planner, and had a specific online 'to-do' list to help me. Devise your own way, but committing to it long-term and not seeing one day as an end in itself will help.

4) Be more Jack Reacher!

I don't mean be 6'5" and 250lbs. But his mantra, 'Hope for the best, prepare for the worst', is worth considering. It really does help to accept, before anything happens, that something could go wrong. This doesn't mean you need to be pessimistic and dismiss things with 'I knew that would happen' – if you knew it, why didn't you plan to avoid it?

But, too often people think they must present an idealised view to the world, especially thanks to social media. So, this is where your professional friend is so invaluable – sharing your worries and talking through where you can perhaps let go a little bit can work wonders.

Most of us in education, for the sake of the children, resonate with the swan analogy (appearing calm on the surface, while furiously pedalling

under water),
but we need to

prepare for the unforeseen. It's not what happens, but how you deal with it that counts – which I have found is a lot easier when you aim for perfection while accepting that it may not happen. As the saying goes: 'Aim for the moon. If you miss, you may hit a star'.

5) Today is a new day

Yes, this may be a cliché, but it is true and something we will often say to the children, so why not to ourselves? This may be hard for people who have challenging circumstances, but think about what you could do to start each day afresh. It could be as simple as changing your morning routine, driving a different route to work, or listening to your favourite songs (sort yourself out with a playlist!).

I have found that if you start the day in a different way after a setback, it affects your mood and mindset. See it as a new opportunity, otherwise you can become like the stereotypical sports player who doesn't change their underwear because they're 'lucky' - though, probably not for the rest of the changing room! Getting stuck in a rut isn't fun for anyone, and it can certainly sap your energy and love for your job.

This is, of course, just the start, but by using these approaches I have been able prevent negativity from overriding success, and I still enjoy and want to teach 25 years on. Not bad!



Mark Creasy is an Independent Thinking Associate and experienced

primary school teacher. His new book Independent Thinking on Primary Teaching (Independent Thinking Press, 2022) is out now.







BiGDUG's shelving and storage helps you stay organised.

The trusted experts in space utilisation.

See our full range of Gratnells Trays online.



WWW.BiGDUG.CO.UK

03450 177 721



an exclusive musical experience for your pupils from

SCHOOLTIME SHOWTIME

ant to win a digital theatre experience complete with online interactive resources? Schooltime Showtime is a flexible and accessible musical extravaganza combining high-quality orchestral footage with the classic fun of animated films. With a choice of either Wallace & Gromit or The Snowman, Schooltime Showtime provides the perfect introduction to the magic of the orchestra with captivating, close-up views of musicians

and their instruments. Ready to watch at a time that suits your school, this comprehensive package caters for different classes, year groups, and educational needs with readvto-go lesson ideas, including 'how to' videos, activities and downloadable resources differentiated for EYFS to KS3. Two schools will win this complete theatre experience that is sure to bring smiles to the whole school - in the words of one teacher: "Totally engaging; 74 wide-open mouths!"

What's on offer?

- Two award-winning packages worth £295 each
- Choose between Wallace & Gromit in Concert or The Snowman
- Three-week streaming period of your chosen show
- Interactive, ready-to-go resources

For more information visit carrotproductions.com/ss

Enter now at teachwire.net/giveaways

MATHS SPECIAL

INSIDE THIS SECTION



How to use maths newsletters to help families support their children with the subject...



Mastering mathematics is about more than just good SATS results...



It may have a bad reputation in edu circles, but differentiation deserves a glow-up...



Teachers can do their part in tackling climate change by teaching maths...

Manipulate to CALCULATE

From surprising patterns to solving puzzles, make addition and subtraction a bit more playful with visual representations

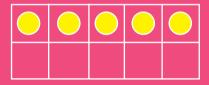
GARETH METCALFE

e love doing mathematics when it enables us to be creative, when it uncovers surprising patterns and when it gives us the opportunity to find novel solutions. At its best, maths gives us a chance to think divergently and approach problems in different ways, and to be mentally playful.

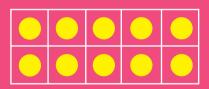
When I describe maths in this way, you probably think of your favourite problem-solving task, and rightly so. I love the buzz of the classroom while children grapple with an exciting logic puzzle or an open-ended Nrich task. But what if we could take some of the traditionally more routine aspects of maths and open them up to more wide-ranging ways of thinking too? Even in addition and subtraction!

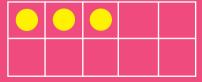
Adding and subtracting within 20

A big emphasis is placed – quite correctly - on developing children's mental fluency in addition and subtraction within 20. So, for example, we hope that learners develop a range of strategies for deriving the answer to 7+5, supported by practical experiences and visual representations, like 10-frames. We encourage pupils to make a 10, seeing the 5 partitioned into 3 and 2, and want them to notice that 7+5 is 2 more than 5+5, by partitioning the 7 into 5 and 2. We may also draw out that 7+5=6+6 by moving one counter from the left 10-frame onto the right 10-frame. Now we can use our doubles facts. too, in order to find the answer.



Similarly, let's consider the different strategies that children can use for calculating 13 – 8. I like to show children 13 on two 10-frames. Then I ask them where they visualise the 8 being subtracted from: the left 10-frame, the right 10-frame or both 10-frames? Subtracting from the left 10-frame encourages a 'counting-on' thought process. When subtracting from both 10-frames, pupils are encouraged to see the parts of 3 and 5 being subtracted. Again, we can promote different calculation strategies here.





Making choices

By developing a range of efficient mental methods for addition and subtraction within 20, children will become genuinely fluent and we can encourage them to start choosing the best method for any

In association with (



given calculation. How, then, can this ethos be continued when pupils progress to adding and subtracting twoand three-digit numbers? If we revert to working predominantly in the abstract, children often end up using written methods to perform every calculation. But in coming back to the visual representations, and by celebrating the different methods that learners can use, we continue to develop these flexible, diverse

For example, when representing 27+26 as quantities in 10-frames, maybe children will suggest moving 3 counters to change the calculation into 30+23. Perhaps they will suggest adding the 10s then adding the 1s. Or maybe they will also recognise that they could calculate double 25 plus 3.

"At its best, maths gives us a chance to think divergently and be playful."

Again, all these strategies can be modelled and celebrated. children progress into performing a calculation like 297+154, they can come to recognise that the answer will be equivalent to 300+151.

Think big

further even as pupils practise calculation methods. Consider, for example, this sequence of three questions:

573+245=

543+275=

537+281=

Children are likely to calculate the answers using a column method. And if they answer the questions correctly. what will they discover?

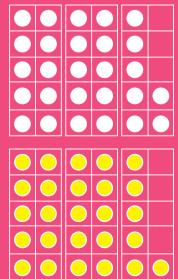
difference'. So, for example, we might start by giving children sequences of questions like this...

9-6=

...and then using a visual These big ideas can be explored representation to show that when the minuend (the number from which we're subtracting) and subtrahend (the number to be subtracted) increase or decrease by the same amount, the difference between the two numbers remains the same. This is a pattern that I will keep coming back to throughout lessons, and this idea can then be explored example, we can recognise that 41-18, 43-20 and 39-16 all have the same answer. However, we

found the answer to question one, children might notice that the answer to this is actually the same. Why? Because the minuend and the subtrahend have increased by the same amount. And for question three, pupils may expect the answer to be the same as question two if they recognise that the minuend and the subtrahend both change by 20. But, of course, the minuend increases by 20, whereas the subtrahend decreases by 20. This means that the answer to question three will be 40 more than the answer to question two. Children might even notice this before they carry out the calculation, but they normally complete a written calculation to check their theory. This is such a rich opportunity for reasoning and pattern spotting.

Of course, for children they need these methods and approaches to be promoted consistently, year upon year, using visual representations and reasoning techniques. It's not a fast road, but it promotes rich and diverse thinking. By focusing on these big ideas and relationships, children are given the tools to approach mathematics with curiosity and flexibility, and we tap into a deeper expression of what it is to be a true mathematician. For me, these ideas have brought previously dry aspects of the maths curriculum to life! TP



That all the answers are the same! Why? Well, the only difference between question one and question two is the position of the 10s values within the addends. This doesn't affect the sum. And we can explain the link between question two and question three by explaining that 537 is 6 less than 543, and 281 is 6 more than 275; therefore, the answer is the same!

By putting the questions in this sequence, as well as practising their calculation to these big mathematical principles and have more

The key idea that I focus on in subtraction is 'constant might also see that some of the calculations are easier to perform than others!

Now, let's consider another short sequence of questions that can draw children's attention to these big ideas, as well as giving them the opportunity to practise their Have a go at answering these three questions: 558-233=

564-239=

584-219=

The first question can be calculated relatively easily using a column method, as regrouping is not needed to find the answer. Question two does require regrouping, but having



Gareth Metcalfe is the director of I See Maths and author of

the I See Reasoning and I See Problem-Solving eBooks.



@gareth_metcalfe iseemaths.com



The **Building for a Greener Future challenge** is 10 weeks' worth of print-out sheets and challenges will encourage children to learn about the environments in which they live and to support the development of a sustainable world.

Another key focus is to sustain mathematical and STEM subjects' abilities over the summer break with weekly challenges on measurement and geometry.

These FREE resources provide a flexible framework guide for teachers to run a range of projects over the summer term. They can commit to the full project or draw on part of a project to deliver in class.

Go to

www.whizz.com/summer-challenge-2022/

to access the full set of activity packs

REASONS TO TRY... **Whizz Education** summer activities

Free downloadable learning ideas for teachers and parents that focus on the environment



30 SECOND BRIEFING

Whizz Education is teaming-up with PiXL to deliver free summer learning activities focusing on the topic of climate change, sustainability, and 'Building for a Greener Future'. Activities encourage children to learn about the environment and to support the development of a sustainable world.

BUILD FOR A GREENER **FUTURE**

Maths is a powerful tool in tackling the climate crisis and teachers can instigate positive change. Without numbers, pupils would not understand ideals like the carbon budget or the limit of 1.5 degrees of warming at the centre of climate change debates. This learning could help pupils to deploy their maths in innovative, world-changing ways. As well as teaching students to handle numbers. the summer project has the capacity to inspire, engage and empower.

SUPPORT SUSTAINABLE **DEVELOPMENT GOALS**

Numerous studies have shown that climate change education has the biggest impact when students are encouraged to take responsibility for learning about issues that impact them and their communities. Activities will be based around UN Sustainable Development Goals 7, 9, 11 and 13. They will encourage children to learn about the environments in which they live and to support the development of a sustainable world with a focus on

STEM activities during the summer

APPEAL TO ALL **ABILITIES**

term and summer break.

The project is wide-ranging and can be approached from an open perspective, focusing on accessible tasks that are

relevant for individuals or groups of students with a By using rich and varied challenges, the key success factor is exploration rather than outcome. There are no expectations, and students can work to their individual level focusing on small elements, or a complete project. It will also work well for those with a range of learning difficulties as the extent of involvement can be individualised.



DRIVE **CURIOSITY**

Developing an interest in climate change will help students to learn new skills in a practical way to increase learning. Guided by teachers or parents, a series of eight sections contain open-ended activities encouraging children to 'go and investigate'. Combined with appropriate support, they are designed to be appealing and hands-on, and to drive curiosity. Inspiration could contribute to saving the environment, have a profound impact on the future of the planet, and can be used to cultivate cross-curricular skills including mathematical knowledge.

challenge-2022/



INSPIRE CHANGE

From 'Water is Power' to 'Energy in the Wind' to 'Build a Town' there are plenty of resources to support learning and inspire children to think about Building for a Greener Future. Students could measure rainfall and make records on how they could be useful, fair and impactful in the future. Or they could be discussing climate change, celebrating World Environment Day, initiating projects to improve the sustainability of their own school, or starting clubs to inspire change. Join us and make a difference!

KEY POINTS

Free downloadable resources professionally designed by leading educationalists to inspire and drive curiosity with a focus on hands-on activity.

Support learning in STEM subjects using different cross-curricular skills over the summer term and summer break.

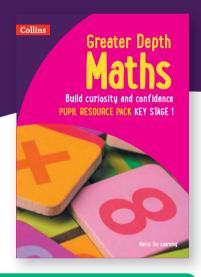
Practical application of problems to engage children of all abilities with new topics around climate change, enabling everyone to get involved at their own level.

Topics explored in school can be extended over the summer break as resources support homework projects and parental involvement.

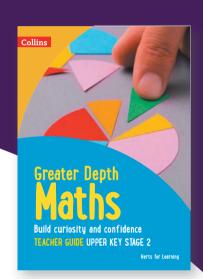
Collins

Build curiosity and confidence

with greater depth maths pupil and teacher resources for Years 1-6



Collins Greater Depth Build curiosity and confidence PUPIL RESOURCE PACK LOWER KEY STAGE 2



Notes for teachers to support the delivery of maths at greater depth



Balancing Act

Introduction

Balancing Act uses images of different shapes on balance scales. Children use the mass of one shape to work out the masses of other shapes on other balance scales.

Children investigate similar problems, working with others to share ideas, and hey create their own problems, all the while communicating their ideas and findings.

communicating their ideas and findings. This task promotes greater-depth learning in a range of ways, supporting children to identify and articulate underlying mathematical structures. For example, in the Curious stage greater depth is promoted by asking children to make rich mathematical contributions to discussions and suggest a variety of appropriate mathematical questions.



National Curriculum

Multiplication and division

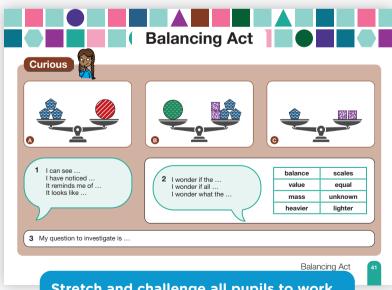
The 6C cycle

veighting given to each of the 6 Cs in Salancing Act.

			Curious
Curious	***		
Connect	会会	Consider	Connect
Collaborate	*	Consider	
Communicate	会会		Collaborate
Create	会会	Create	
Consider	☆☆		

Explicit links to the National Curriculum make it easy to weave into your existing scheme of work

Created by a team of maths experts from Herts for Learning, the largest school company in the UK dedicated to improving education for young people



Stretch and challenge all pupils to work independently and think more deeply within maths with 20 ready-to-use tasks for each year group

collins.co.uk/greaterdepthmaths

Make it COUNT

Are parents finding it difficult to support their children with maths? Try a newsletter to explain new vocab, and pique their interest

very one of us does maths in some form every day, whether it's setting a timer while cooking, working out what time to leave to get to work, or mentally calculating how many days are left until pay day.

By the time we become adults, most of this has become so ingrained that we don't even notice or class it as 'doing maths'. I've lost count of the number of times I've had someone say to me that they are terrible at maths, yet they manage these processes (and many more) every day.

Often, what it boils down to is that we can use maths in context without a problem, but we sometimes find the abstract nature of the subject – such as column subtraction or adding

struggled with it themselves when they were in school.

When I became maths lead, I wanted to start communicating with parents more effectively, and decided a digital newsletter would be the best way to do so. Each class already sent home newsletters every term telling parents what their children would be learning in the upcoming weeks, so I was keen to avoid repeating that information. I also wanted to avoid it being too dry and information-filled, as no-one wants to read that when it pings into their inbox! I had two main aims: to encourage mathematical conversation at home, and to empower parents to support their children's learning.

Since starting up the

for ways to support their children in maths.

my maths newsletters:

Writing maths questions relating to pictures is a very low-threshold, high-challenge activity. In my first newsletter, I used one of my favourite maths pictures: a set of kitchen tiles with some oranges lined up along two perpendicular sides of one tile (you can see it in the downloadable example). I've used this with several



www.teachwire.net | 53

MATHS SPECIAL

In association with

"Often, we can use maths in context, but find the abstract nature of the subject difficult.'

fractions – difficult. For parents who last came across formal calculation methods when they took their exams at the age of 16 or 18, supporting their child in maths may be daunting (especially when the likes of long division raise their heads!). This is particularly true if they weren't keen on maths, or

newsletter, I've had some great conversations with children about the different puzzles they've tried and how they've solved them. I've even had a child suggest a puzzle to include! It was also really useful at parents' evening to point parents towards the newsletter when they asked



FIVE TIPS FOR CREATING YOUR OWN MATHS NEWSLETTER

Keep it simple
Try to avoid it becoming
too wordy by keeping the
same sections in each issue so
parents know what to expect
each time. If it can't be said in
a few sentences, a newsletter
might not be the right place
for it!

Plan in advance
To prevent it from
becoming another task
looming over you, create an
overview of which sections you
want to include and what you
want to put in each issue. This
means that you won't have to
trawl back through previous
issues to see if you've already
covered something.

Choose methods you want to promote
If you want to share key representations and strategies, think about what parents need to know and what language they need to discuss it. If your school uses bar models, you might want to do a series on using them in different situations, e.g. finding fractions of numbers or solving missing number problems.

Prioritise discussion
Maths pictures and
challenges provide
parents with a way to talk to
their children about maths
and share their ideas. Quite
often, the maths homework
that children will bring home
will be based in fluency, but by
including interactive problems,
you can create an opportunity
to develop problem-solving
skills that parents can get
involved with.

Go digital
Rather than printing your newsletter, email it to parents or put it on your school website. You could even set up a Twitter page or other forum to share questions for the maths pictures or answers for the challenges.





FIRST MATHEMATICS CHALLENGE

20TH JUNE - 8TH JULY 2022



The First Mathematics Challenge (FMC) is an **EXCITING, ENGAGING** worldwide mathematics challenge for your pupils aged **7 - 9** and supports **MATHEMATICS ENRICHMENT.**



The minute hand of a clock is pointing to the number 6. After 1 hour and 20 minutes, what number will it be pointing to?

A6 B7 C8 D9 E10



PUPILS CAN TAKE PART ONLINE





FIND OUR MORE AND PLACE YOUR ORDER
PRIMARYMATHSCHALLENGE.ORG/FMC

Changing the MATHS MINDSET

Mastering mathematics is about more than just good SATs results, says **John Canavan**

have been championing teaching for mastery at Cambridge Primary **Education Trust (CPET)** since 2015. It was around this time that I was given the opportunity to go on a Department for Education exchange programme to Shanghai - where the concept was born - to observe maths lessons and attend lectures at a local university, before teachers from Shanghai then came to our schools in Cambridgeshire on a return visit. The experience led me to encourage the CPET school I worked in at the time to change to the maths mastery approach, and it was rolled out Trust-wide.

There are different interpretations of what maths mastery is but, for me, there are five big ideas – drawn from research evidence – that underpin this approach.

1. Coherence

Lessons are broken down into small, connected steps that gradually unfold a concept, providing access for all children. This leads to generalisation of the concept and the ability to apply it to a range of contexts.

2. Representation and structure

Representations used in lessons expose the mathematical structure being taught to provide a deep conceptual understanding: the aim of this principle being that pupils can ultimately do the maths without recourse to the representation.

3. Mathematical thinking

If taught ideas are to be understood deeply, they must not merely be passively received but worked on by the child. New concepts must be thought about, reasoned with, and discussed with others.

4. Fluency

Children need quick and efficient recall of facts and procedures, and the flexibility to move between different contexts and representations of mathematics.

5. Variation

This involves how the teacher represents the concept being taught, often in more than one way, to draw attention to critical aspects, and

to develop
deep and
holistic
understanding.
It's also about
sequencing of the
episodes, activities and
exercises used within a
lesson and follow-up practice,
paying attention to what is
kept the same and what changes.
This connects the mathematics
and draws attention to
mathematical relationships
and structure.

So, how has this helped children acquire a deep, long-term, secure and adaptable understanding of the subject at our Trust? Drawing on our journey over nearly seven years, these are my key takeaways for other schools:



MATHS SPECIAL

In association with



"This is not a year-long piece of work; it takes two, three or fours years until you can see the impact"

of the class, rather than being separated. We have tailored these principles to the needs of our children.

> An inclusive, tailored approach

Before teaching for mastery, we did a range of different things, including taking children outside of the classroom to work at a slower pace, but this only increased the attainment gap. Our approach was clearly not working for all pupils. We want everyone to learn together, and so all children now have access to the same learning, fluency, problem-solving and reasoning. This really helped lower attaining pupils feel part

Realistic timescales

Building from Foundation up to Year 6 develops confidence and efficiency, and a by-product of that is results. This is not a year-long piece of work: it takes two, three or four years to see the impact. You have to bring staff with you, which means taking small steps - starting with fluency for knowledge, and developing teachers' understanding of effective use of language. This way it becomes less onerous and you can start seeing the benefit straight away.

Changing thinking

Teaching for mastery should be seen as a continuum. In our Trust it is not happening perfectly every day in the classroom, but there has been real progression. Through the Cambridge Maths Hub, and Fenland and East

Cambridgeshire Opportunity Area, funded by the DfE, we have taken on a role to develop training in maths in other schools. In opportunity area schools, especially, it is about changing mindsets. Primaries are obviously measured on SATs, but we have changed the focus from preparing pupils for tests, to developing a deeper maths understanding.

> Ask questions, give ownership

I go into schools, listen to their approach to maths and ask what they are doing and how they are finding it; a mutually professional dialogue that is also a learning process for me. Support can include lesson design, or other areas with which staff need help. Heads and senior leaders then take this knowledge into CPD sessions: training is essential to making sure mastery is happening consistently across all age phases, and that it is continually maintained. Following on from this, leaders need to constantly monitor and support pupils.

Provide CPD

Turnover of staff is a huge issue for some schools. We often find schools we supported a few years ago now have different teams in place, which can make it difficult to maintain forward momentum. At CPET, former classroom teachers are now assistant heads or maths leads. The Trust does not have a high staff turnover, which means we have consistency, and this is due in large part to the professional development opportunities on offer. I know lots of people who have come a long way colleagues who now lead the training themselves.

Instil passion, make learning fun

I have always had a passion for maths. I love to see children grow, develop and foster a love for the subject, and we have always sought to counter the national picture of 'can't do' maths. Before maths mastery,

How to implement maths mastery

- · A whole-school strategy on teaching for mastery is essential, but you need to be realistic on timescales for delivery and impact.
- · A change of mindset on the approaches to teaching maths can have a deeper impact on children than one that simply seeks to prepare them for national tests.
- · An inclusive approach where every child has access to the same learning, fluency, problem-solving and reasoning, is key.
- · Give ownership and hear colleagues' ideas. Don't be regimented, but at the same time do not dilute the mastery approach and ensure that staff have the support they need to take the learning forward themselves.
- · Always remember that if the children are happy, if they are enjoying themselves, the learning comes.

children did not have a deep understanding, or knowledge of the big ideas that underpin the subject. They were procedural mathematicians. This was impacting on GCSE results and beyond, because the understanding was not there. We want to create critical thinkers, rigorous learners, and to build deep understanding of concepts. Every school is judged by results, but there is a bigger picture to consider. TP



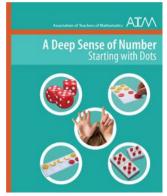
John Canavan is assistant headteacher and Year 6 teacher at Hatton Park **Primary**

School, part of Cambridge Primary Education Trust



A DEEP SENSE OF **NUMBER STARTING** WITH DOTS

Over 50 activities, games and ideas for whole class teaching, small groups or pairs, designed to guide children in developing number sense.



The activities start with a link to children's intuitive sense of numbers through finger patterns and their ability to recognise small quantities. Then, the dot patterns build to working with larger quantities. Using the patterns in different ways, children make discoveries and connections which lead them to think mathematically and work confidently and flexibly with numbers.

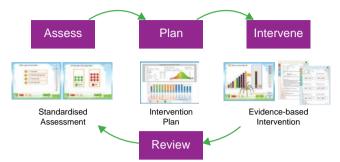
"If you work with young children, helping them to develop number sense, then you should get hold of a copy of this wonderful book from ATM. It explains it all with numerous examples". Bernie Westacott

Go to: www.atm.org.uk/Shop/ACT132pk

Dyscalculia

Inclusive Maths Catch-Up and Intervention

Support for pupils at risk of dyscalculia and not meeting age related expectations



Dynamo Maths

Request a FREE school trial.





FREE

Accredited Financial Education Teacher Training

Limited places remaining

Money Heroes are offering free in-house financial education teacher training and bespoke 1:1 mentoring support, to provide educators with confidence, knowledge, and skills to develop children's habits and attitudes around money. We have a limited number of sessions available, so book now to secure your place.

What will the training and mentoring cover?

- Guidance on financial education and how to implement within the primary
- · Ideas on parental engagement.

How does it work?

- education teacher training session for 5 or more teachers within your school or academy trust (session can be split into two).
- The sessions can be virtual or in person.
- Training is school-specific and arranged at a time to suit you.

HSBC UK

Request a session by scanning the QR

code below or visiting

www.moneyheroes.org.uk

You can request a 2.5 hour financial

You can request up to 4 hours of financial education mentoring for individuals or smaller groups of teachers.

Got questions?

Get in touch: moneyheroes@y-m.org.uk

In association with



Different STROKES

It may have a bad rep in edu circles, but differentiation is due a glow-up

LISA COE

ifferentiation. This single word can send a shudder down the spine of the most hardened maths lead. The term has been packed in some forgotten corner along with VAK (visual, auditory and kinaesthetic), must / should / could, and Brain Gym, and in some parts has even been banned.

But I think differentiation has a bad reputation. During its journey it fell in with the wrong crowd, got blamed for things it (often) didn't do, and ended up so covered in metaphorical mud it was shunned from educational circles. I want to bring it back. It's time differentiation had an edu glow-up.

Let's start by brushing it down and going back to basics. Differentiation means addressing learner variance. Sue Cowley, in *The Ultimate Guide to Differentiation*, puts it perfectly: 'It is the subtle, flexible and responsive approaches you use that are the nuts and bolts of everyday differentiation'. Flexibility is key here; differentiation can sometimes be considered rigid and pre-designed, and is sometimes blamed for placing a 'ceiling' on learning. But differentiation in the moment, using formative

Now consider the terms 'scaffolding' and 'adaptive teaching'.

Somehow we're

OK with these

for now.

assessment to react to what

is in front of you? That's

powerful stuff.

- for now Adaptive teaching even appears in the new Early Career Framework (ECF), which says teachers should be 'adapting lessons, whilst maintaining high expectations for all, so that all pupils have the opportunity to meet expectations'. If that's not addressing learner variance – aka differentiation – then I am not sure what is.

Whatever you call it, and however you think about it, here are some quick and easy ways to differentiate in maths and provide more learners with independently-gained success:

1. Provide a safety net

Some pupils don't know their number bonds and times tables. Intervention, additional teaching and practice supports this, but when children need to apply that knowledge, they can become unstuck.

If pupils are learning about equivalent fractions, for example, then knowledge of multiplication facts is one key aspect to be able to efficiently find equivalence. Differentiation here consists of providing a multiplication square for those learners you know aren't secure in multiplication facts.

Or providing specific multiplication tables to support them with the examples you will use.

2. Represent maths With the rise of mastery

teaching in mathematics,
representations are
becoming more
commonplace in the
classroom, and it's
pretty standard to
use them when
modelling. For
example, a Year
4 teacher might
use bar models

to represent improper fractions, providing a clear visual as to 'how many wholes' the improper fraction is equal to.

Often when it comes to independent work, however, we provide abstract questions and expect pupils to draw or visualise their own representations. But some learners need these representations, such as a picture of Dienes to show the number, a bar model, or a 'first, then, now' picture story of the problem. Differentiating in this way allows all pupils to access the same mathematical problems, with some being supported to see the underlying structure.

3. Provide the answers

For some children, more complex worded problems or multi-step calculations can be cognitively challenging. Most of the time, the context of the problem can be daunting - I'm thinking of the 'crocodiles and alligators' assessment question. Pupils usually have strategies for solving problems, but can become 'bogged down' in the context. Vocabulary acquisition can also provide challenges; if a pupil simply hasn't been exposed to the language of the problem. they can use precious energy trying to decode the question, before even getting to trying to solve it. To avoid this, provide the answers. You can do so in a number of ways, such as saying 'the answer is ___. Prove it': asking pupils to match answers to questions, or providing a partial resolution (such as the first step in the working out). When I mention this to teachers as a differentiation approach. I sometimes encounter fear where's the maths? Some pupils (and even teachers!) may consider this a 'cheat', and it's a fair point, but if we consider differentiation as addressing learner variance, the variance here is that there is a language or context barrier and we want pupils to see the underlying structure of problems. Children still have to work out how the answer is found - they are still 'doing maths', but with less pressure.

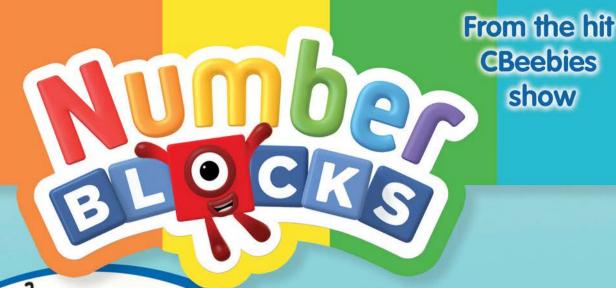
In essence, I think differentiation is 'good teaching' and what we do day in, day out. Teachers adapt to learner variance in myriad ways – large and small – and yet shy away from the word. Let's call it what it is: we differentiate to allow our learners to succeed. And that's no bad thing. **TP**



Lisa Coe is primary maths lead at the Inspiration Trust.



@InspirationEast inspirationtrust.org



0

Add even more number magic to your classroom with new Numberblocks **Reusable Clings**

show

Perfect for windows & whiteboards

Use over & over again!

New Numberblocks Reusable Clings are made from an innovative, durable material. They're ready to use straight from the box - no adhesive needed! Perfect for hands-on maths working walls.

amazon

Includes 142 pieces needed to create characters 1-10





In association with

Evaluation Evaluation

Teachers can do their part in tackling climate change by teaching maths, says **Fiona Goddard**

ometimes it can be difficult to know where to start with a huge topic like the climate crisis, but maths is a powerful tool in understanding the information we receive, and teachers can play an important role in positive change.

In a number of her speeches, Greta Thunberg makes it clear that climate change should be spoken about everywhere and often with the kind of gravitas that the Earth's predicament warrants. She marvels in her speech entitled 'Almost Everything is Black and White' (2018) that "the vast majority [of people don't] have a clue about the consequences of our everyday life". Indeed, the School Education Gateway survey on Climate Education found that only four per cent of students felt that they knew a lot about climate change. This is something that teachers are well-equipped to change.

Creativity of teachers

Understandably, many teachers feel that the onus is being placed upon them to teach about climate change without the proper guidance or training to talk on a topic they believe to be controversial and at the expense of prioritising core skills and examination subjects.

However, in the report *Unleashing* the Creativity of Teachers and Students to Combat Climate Change, the Brookings Institute remains optimistic that the creativity of teachers can help solve crises, build civic society, and establish a green learning agenda.

And teachers are not alone in the process. There are growing calls to integrate climate change across the curriculum by organisations like Earth Day and The World's Largest Lesson. While teaching on this issue is usually the realm of geographers and scientists, the Department for Education (DfE) promised at COP26 to place the topic at the heart of education as a priority for all departments.

Data, stats and models

So why is maths, specifically, important in fighting climate change? Well, without

numbers, students would not understand ideas like the carbon budget or the degrees of warming at the centre of climate change debates. And, without using data to think abstractly, our senses and observations alone would not confirm that a crisis is occurring or that we need to act.

Climate change is also a statistical phenomenon that is understood by mapping changes in average measurements (of temperature, sea level or snow fall, for example) over time and analysing variance to provide convincing evidence of a change in the global environment. We must use different mathematical processes to procure these measurements and help build models to predict what is likely to happen in the future. Decision-makers and the public alike need a grounding in maths to understand this kind of information, for example through mathematical diagrams.

Citizens must also be able to determine how to be critical of data to align their behaviour with information they trust, and pass-over data presented with an agenda.

Promoting action

How does maths combine with active citizenship skills to change the world? Governments listen to numbers! In societies that are numerate, mathematical evidence is a convincing way of prompting action and everyone needs to develop skills in effective problem solving that will help them to create local and scalable solutions to climate change.

As well as teaching students to handle numbers, education has the capacity to inspire, engage and empower. Numerous studies have shown that climate change education has the biggest impact when pupils are encouraged to take responsibility for learning

communities.
For example,

about issues that impact

them and their

older children might meaningfully analyse data relating to snow in their local area; learners responsible for growing plants on a patch of land become invested in the survival of vegetation; and installing a solar-powered water system to tackle the impact of drought on Runesu Primary School in Zimbabwe encouraged increased climate activism.

Classroom ideas

In an area with especially high or low rainfall, why not elevate maths skills by collecting and recording how many millimetres of liquid are captured daily and discussing how to make the records useful, fair, and impactful in the future?

Talking about climate change, celebrating World Environment Day, having visiting experts speak, initiating projects for children to improve the sustainability of their own school (for example, by reducing food waste), or starting clubs to save the environment will have a profound impact on the future of the planet and can be used to cultivate ever-important mathematical knowledge and skills. **TP**



Fiona Goddard is a senior education consultant at Whizz Education. Get involved with Whizz Education's collaborative summer project with PiXL, Building for a

Greener Future, at whizz.com/summerchallenge-2022





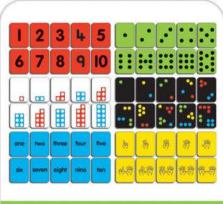
Numeracy Resources For Primary Schools



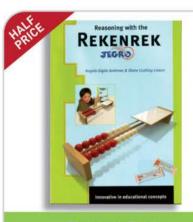
Numeracy Specialist Extensive Range

Produced in the UK







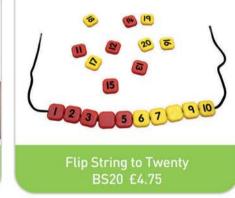


Rekenrek Book CF22 £6.95

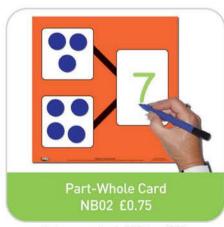


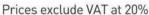














It all adds up...

Expert resources to help you support pupils' maths development

Individualised learning journeys

Whizz Education is accountable for learning outcomes, and we have been working with teachers for two decades, to boost the performance of their students in maths via our virtual tutor, Maths-Whizz. The tutor delivers adaptive, scaffolded, individualised learning journeys tailored to the specific ability and pace



of learning of each student. Used for an average of 60 minutes/week, Maths-Whizz is proven to improve "Maths Age" by >18 months in the first year, without the need for marking. Find out more at **whizz.com**



Supporting Dyscalculia

Dyscalculia and maths catch-up

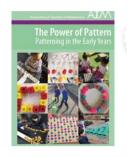
Dynamo Maths is an award-winning standardised dyscalculia assessment and evidence-based intervention to support children with dyscalculia and maths developmental delays.

The programme supports children with complex maths difficulties or falling behind to get back on track. This specialist resource offers a small step, cumulative approach using a triple pathway approach of lesson plans, online activities and worksheets that provide multiple contexts for learning. It is seeing gains far greater than previously thought possible. The program has also been adapted to Puffin Maths, which supports BSL (British Sign Language) and provides ICT based curricular maths access to children who are deaf and hard of hearing. The programme won the BETT AWARD 2022 - HIGHLY RECOMMENDED. For a free trial, visit dynamomaths.co.uk (BSL: puffinmaths.co.uk) No child with dyscalculia will be overlooked.

Numberblocks from Learning Resources®

Bring maths learning to life with the Numberblocks, as seen on TV. These hands-on maths teaching resources from Learning Resources® include The MathLink® Cubes Activity Sets (1-10 and 11-20), which have all pupils need to build the Numberblocks One to Ten, and Eleven to Twenty, using special edition MathLink Cubes, Character Cards about each number, and 15 double-sided Activity Cards with activities related to selected episodes. Recreate the Numberblocks One to Ten on windows and whiteboards in your classroom with new Numberblocks Reusable Clings. This set is ideal for demonstrations and working walls. Learn more at learningresources.co.uk





The power of pattern

The power of pattern – patterning in the Early Years, by Alison Borthwick, Sue Gifford and Helen Thouless includes activities for those working with young children to develop awareness of pattern and structure (the foundations of mathematics), using fun, creative activities that develop collaboration and mathematical thinking. Helen Williams (Early Years specialist) says: "It is not often that a book lands in our laps which manages to blend research with practice so effectively and engagingly. This book, on how mathematical pattern awareness is linked to wider numerical understanding, is certainly one." Find out more at

atm.org.uk/shop/ACT133



The rise of Rekenrek

Originating in the Netherlands and used effectively in several other countries, Rekenreks or 'number racks' have recently risen to fame here as part of the DfE / NCETM Mastering Number programme. They are a fabulous resource for encouraging progression from counting to subitising and then on to calculating. Autopress Education has supplied these resources to UK schools for 20 years and has the widest range of related resources. In addition to the child's Rekenrek, Autopress supplies two different demonstration versions including screens for 'hiding' beads, as well as two support books written by Rekenrek specialists. Find out more at autopresseducation.co.uk

www.teachwire.net | 63

INSIDE THIS SECTION



Christine Chen and Lindsay Pickton explore inference and the power of cake in the picturebook classic, Rose Meets Mr Wintergarten...



Well-formed, clear handwriting doesn't just look good; it's an indicator of improved outcomes, well beyond KS2, says Sue Drury...



Discover ideas on how to teach high-frequency words, and master tricky spelling, with Michelle Nicholson...

RECOMMENDED **RESOURCES**

CEW/SSW SUPPORT Make sure pupils are secure in their understanding of how to spell and use all the CEW/SSW for KS1 and KS2, with this bright and appealing collection of worksheets from literacy specialist website, Plazoom - ideal for home learning or classroom use. Download

yours at bit.ly/PlazCEWSSW



Meet the

Whether learning about the past or trying to understand the present, historical fiction provides a wealth of opportunity for pupils, says Michael Rosen

ll writing starts from somewhere. Whether it's real people providing inspiration for characters, or events from real life influencing a plot, there are various ways in which our experiences - and those of others' - seep into our stories.

Personal life experiences, or those of people you know, are a great place to start when writing, and when we ask pupils to create their own stories, they shouldn't feel as though their ideas have to come as if from nowhere. After all, some of the greatest storytellers throughout history have taken inspiration from all sorts of places. Take Hans Christian Anderson, for example; many of the stories he developed came from things he heard as a child. It's a well-used method amongst authors, and so if they're stuck for a starting point, we can encourage pupils to think of stories that already exist in some form, and use them create their own take on things, or to try and understand the experiences of others.

This kind of understanding, however, can be difficult, especially when we're dealing with 'big' concepts such as war, famine, and the impending dangers of the climate crisis. Approaching these kinds of topics with young children can seem like a minefield. We want to help them understand the world around them, and yet we don't want to scare the living daylights out of

them. I think one way to do this is to approach narratives from the point of view of children around the same age as your pupils. War, for example, is often incomprehensible to most adults, so in one sense it seems wrong that we should expect children to understand it; the whole concept often defies logic, as with the current war in Ukraine. However, children are curious creatures, and so it can be quite handy to consider things from their point of view, which is where literature created specifically for young people comes in. Being able to tell a story about a child who is not an agent in war, but who is on the receiving end, can help us delve into these topics in a sensitive way.

History and truth

Tying fictional narratives to real life can also help children to understand the past, and it's this connection with history that I hoped to achieve in my latest book, Please Write Soon. Although the letters through which the story is told are made up, they are based on real events that happened to my dad's cousin, Michael Rechnic; the inspiration for Bernie.

Fictionalised accounts of historical events and experiences can also give children the license to think about what might be real, and what might be biased. Are the characters to be believed? Why are they telling the story in the way they are? What can we

garner from the context of the story, aside from what the characters are saying? It's a good way to introduce children to the skills of inference and critical thinking, too; something that not only will support them in their schoolwork, but throughout their lives.

There are plenty of things in most stories that pupils can question and investigate; the story of Wojtek the bear, for example, who was adopted by the Polish soldiers, and who features in Please Write Soon. There may be some sharp-thinking children that pick up on this, and wonder whether or not it was fair to bring an animal into a warzone. Stories give readers a distance from the concept, or even the reality they're describing, and pupils don't have to take everything as read - encourage them to challenge things. Another issue pupils can investigate is that of propaganda. At first glance it may seem like a relic of wartime, but the pervasive nature of the media, and the wide access that children now have to 'news', whether that's via TV, social media, or overhearing conversations at school and at home, means it's possibly more relevant than ever.

For example, I went to visit my old school recently, and although many things haven't changed - I took the same train to get there, and the waiting room at the station is still as it was - there are so many areas of life that are completely different. I was at the school to talk to the sixth form, and when I was in their position, I used to have to go down to Watford reference library to do research, and was lucky if I got the Britannica encyclopaedia out and found something more than what the teacher had already taught us. In contrast, these days, we can all research an infinite number of things in seconds, on our phones. We don't even need to go and turn the computer on, anymore. It's important that

we help the younger

generations to wade through all the information they're getting, and figure out what is to be believed and what isn't.

Resourcing the past

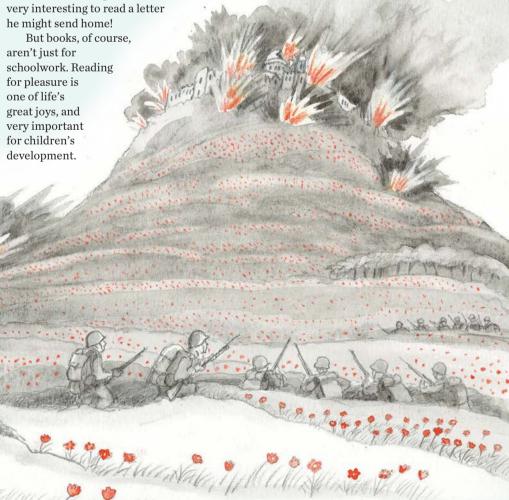
This doesn't just have to apply to modern-day information, either; you can also encourage your pupils to develop historical research skills. Ask them to take their favourite aspect of a book based in the past - whether that's a character, an event, or even a theme - and see what additional factual information they can find about it. In the case of stories about World War Two, children can look up Polish resettlement camps, Anders' Army, Operation Barbarossa, and so on. This will help them contextualise stories, and fill in the gaps left by a subjective fictional narrative. There are even plenty of scenes in Please Write Soon, and I'm sure other historical fiction, that they can act out, or have a go at rewriting. This works especially well with books that feature stories told through letters or diary entries, etc, as pupils can really get 'in-character' and try out alternative versions of the narrative, or consider the same story from different points of view. For instance, Wojtek the bear may have had a very different experience to his human counterparts - it would be very interesting to read a letter he might send home!

Books can carry us away to places and times we could never possibly reach in real life, and can also help us to navigate the ups and downs of our days here on Earth. One of the things I hope children will get from Please Write Soon is the understanding that many people in their grandparents' or great-grandparents' generations went through these terrible things and came out the other side. Pupils may even know someone who survived the war. I also hope it will remind them that children are great improvisers, and find ways to get themselves through difficult times; they have an extraordinary capability for resilience. Even when things are tough, it's amazing what young people can get through. It's a message of hope, I think. TP



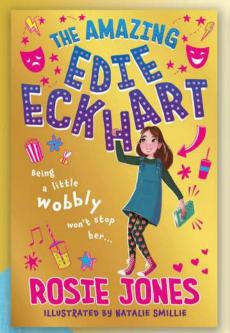
Please Write Soon by Michael Rosen, illustrated by Michael Foreman, is out now (£8.99, Scholastic).

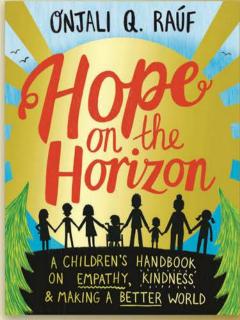
www.teachwire.net | 65

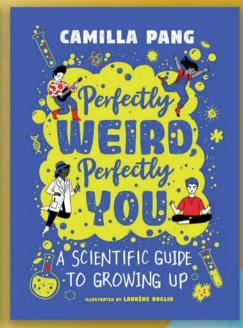


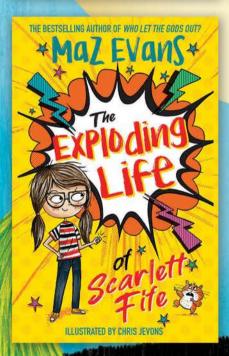
BUILD EMPATHY WITH THESE BRILLIANT BOOKS!

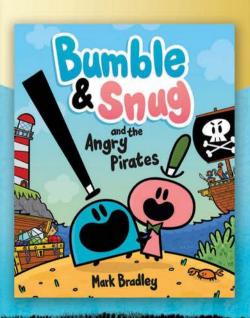
TACKLING THEMES INCLUDING DISABILITY, NEURODIVERSITY,
SELF-ESTEEM AND UNDERSTANDING EMOTIONS









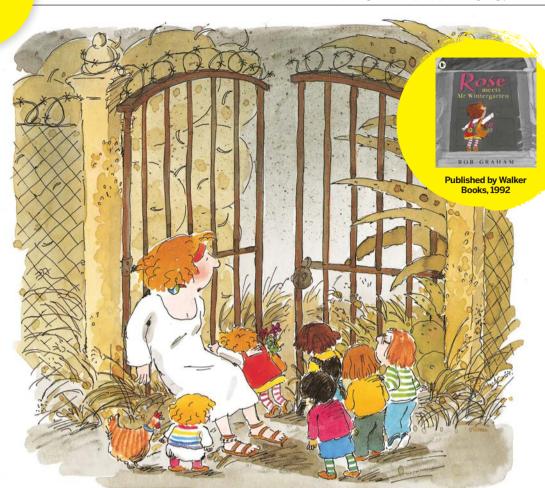






TO ACCESS FREE DOWNLOADABLE CLASSROOM RESOURCES FOR THESE AND OTHER BOOKS, VISIT WWW.HACHETTESCHOOLS.CO.UK OR SCAN THE QR CODE NOW





Rose Meets Mr Wintergarten

Explore the reasons behind grumpy neighbours and discover the power of cakes, while developing inference skills with this beloved picturebook from **Bob Graham**

CHRISTINE CHEN AND LINDSAY PICKTON

n this deceptively simple picture book, Bob Graham introduces us to Rose Summers and her family, new arrivals who must learn about their scary (yet unseen) next-door neighbour, Mr Wintergarten.

Through the first half of the book, Mr Wintergarten is experienced only via his intimidating garden of spiky cacti and barbed-wire fencing, with the huge, permanently gloomy house in the middle... but there are stories about him, shared by the local children – about his wolf-like dog, his

crocodile(!), and how dangerous a trip into his garden would be. Rose does meet him, of course, and he is indeed fearsome, but we are quickly given insights that evoke pity rather than fear, and then we see how a single act of kindness changes the life of an insular, isolated old man, and benefits the entire neighbourhood.

There is a strong history of children's stories depicting the power of kindness in opening-up a closed heart, and *Rose Meets Mr* Wintergarten is an excellent example of this. Post-lockdowns, with isolation

and related mental health issues still making themselves felt, this message is surely more important than ever, and this book can be used to explore ideas around acts of kindness towards lonely, perhaps outwardly-unappealing characters. At a more general level, it is also a near-perfect book for exploring inference – nearly everything important in the story is implied, not stated – as well as developing some handy tier 2 vocabulary and authorial techniques that might be borrowed for children's own stories.



Activities

Understanding the unsaid

This is a story that definitely rewards re-visiting, so whether you are reading it to or with children, or they are reading it for themselves, relish the whole tale unfolding a few times and explore understanding at that point. Ask questions about Rose's behaviour: why did she do what she did? What sort of family does she come from?

Then return to the text and guide pupils through the clues: their surname and the names of the three children: the fact that the parents fill the garden with flowers on their very first day in their new home; and the daily rooftop sunrise-watching. Look at the exchange between Rose and her mum: "Because he eats kids" / "We'll take him some hot cakes instead... and maybe some flowers." What does this tell us about Mum and her attitude to strangers?

Ask children about the first descriptions of Mr Wintergarten; they are likely to want to talk about the vivid descriptions by the local children first, so relish these together and then probe thoughts about this scene. Were the descriptions likely to be true? Are readers expected to believe that he has a crocodile? Tease out the idea of exaggerated stories that are based in truth.

Then ask children to think about the very first mention of Mr Wintergarten, on the rooftop-sunrise page: "Next door, everything bristled. Next door lived Mr Wintergarten." Check understanding of 'bristled' and ensure children make the connection between these two statements.

How does Rose feel when she first speaks to Mr Wintergarten? (Draw attention to her handkerchief.) Why do we think she must feel sorry for him when she sees his meal? (Think about her mum's readiness to bake cakes.)

Bring it to life

Certain scenes in the story cry out to be explored through drama - particularly in mime or freeze-frame. In particular, Rose and Mr Wintergarten's initial meeting, Mr Wintergarten's gradual transformation after Rose leaves, the children's reaction to the football, the slipper coming over the fence, and Mr Wintergarten's request for its return. In each case, once the freeze or mime has been practised, you might encourage children to record likely thoughts their character might be having on a mini-whiteboard, and then return to their scene, holding this 'thought-bubble' by their head.

First and last pictures

The book as a whole is bracketed by two highly-detailed illustrations of the two houses, side-by-side. You can profitably spend time before the first reading looking at the first illustration and drawing inferences from the depiction of the two homes, and the kind of people who might live in them. Even before having read a word, it should be easy enough to make an educated guess as to where each of the two title characters live.

After a couple of readings, spend some





time comparing the two illustrations - in effect, playing 'spot the difference'. This comparison summarises the remarkable transformation the old man undergoes, and you can extend discussion by flicking between the 'before' and 'after' and asking children, what brought this about? This can provoke a retelling, which can be taken further by asking them to consider which was the key thing that caused the change. Was it the cakes? Opening the curtains? The ball going over the fence? The Summers' arrival at the beginning? You might even consider a debate as to which was the turning point.

Vocabulary

There are a number of words in the story that children may not have encountered, but that can be dealt with very quickly: 'handkerchief', for example, can be explained as a cloth tissue (or better yet, just show one!); 'darting (movements)' just means fast (but with an implication of very short duration) - and this can be easily mimed.

'Heaved', however, is worth exploring in more detail, because it is a very useful word generally, and in this context implies a great deal about Mr Wintergarten's gate and therefore his isolation. Again, it can be

Take it further $\Rightarrow \Rightarrow \Rightarrow \Rightarrow$



THINKING PHILOSOPHICALLY

No explanation is given for Mr Wintergarten's isolation and angry manner, but we do witness his reaction to being left with cakes: "No-one has ever asked for their ball back." Which came first: his unwelcoming manner, or no-one approaching him? **Explain to children how this might** become a vicious circle in which a gruff manner (or even a misunderstanding) led to people avoiding him, which led to a more unfriendly manner, and so on. Invite speculation as to what might start such a cycle off, being clear that this is only speculation; we will never know the truth about this character. **Encourage them to generalise this way** of thinking onto people as a whole. Might those who seem scary or

unpleasant have started off less so? What could have made them the way they are? What might help them return to friendliness?

CAKES AND FLOWERS

Rose's mum decides that taking cakes and flowers is the way to win this fearsome neighbour around (and avoid being eaten!). Why does she choose



explored through mime; make sure children understand the heaviness that it suggests, and why a gate might have such properties.

For a real lynchpin word, though, 'bristled' is hard to beat. Understanding that it can be used literally (to describe the spiky plants, fencing and house) and metaphorically (to describe becoming angry or aggressive) is crucial in experiencing the looming presence of the Summers' next-door neighbour. Moreover, it is a 'tier 2' word that crops up often in rich texts, and will enrich children's own descriptive writing.

You might have children mime the literal bristly-ness of the garden, and then follow up by miming the metaphorical meaning with facial expression and body language. Then offer usages in different contexts, e.g. "I untangled my hair with a bristled brush"; or "As she heard the insult, she bristled and took a step forward." Challenge children to come up with sentences like this themselves, to show that they are gaining 'ownership' of the word.

Predictions revisited

This story has several moments when we know something is going to happen before we turn the page and see it. Sometimes these are clear, such as when Naomi says, "If your ball ever goes over, forget it," but sometimes we just know something momentous is about to happen, but not what, such as, "Mr Wintergarten... did something he hadn't done in years..." It is possible to explore predictions even when the story has been read multiple times, by asking children how they knew what was about to happen, and how the author had hinted or signposted things. This process of revisiting predictions is a powerful way of teaching children how to understand a text and will enhance their enjoyment of stories to come.

Thoughts unspoken

Bob Graham doesn't tell us what Rose is thinking; we have to work it out. Take the children through the sequence from when Rose says to her mum, "Because he eats kids," the entry into the garden, as she stands before the owner of the house, when she sees his unpleasant meal, and is told to clear off. Discuss what she could be thinking at each of these points; then, what would be going through her mind as she silently walks away. This could be purely oral, or recorded in writing.

Loved this? Try these...

- ❖ Jethro Byrd: Fairy Child by Bob Graham
- The Selfish Giant by Oscar Wilde
- ❖ The Robot and the Bluebird by David Lucas
- The Selfish Crocodile by Faustin Charles and Michael Terry
- * The Rainbow Fish by Marcus Pfister

Letting the light in

The double page on which "Mr Wintergarten opened the curtains" frequently elicits gasps and sighs from both children and adults, on first experience. It is definitely a page to revisit and consider: the grey contrasting with the colour, the distance of the retreating Summers family, the hugeness of the room and the smallness of the man, and the state-of-mind suggested in the very simply-drawn facial expression and body language.

This is an artistic flourish that could reward imitation, and in so doing, would enhance children's understanding of the literal and metaphorical nature of the scene. They might change the setting and the character, but capturing the moment someone 'opens the curtains to the light' by contrasting bright colour with greyscale – using various media – is highly recommended.



Christine Chen and Lindsay Pickton are primary education advisers (primaryeducationadvisers.co.uk) supporting English development nationally.

these two items? Looking at Mr Wintergarten's house and garden, do these come to your mind as the obvious things he would like? And yet they work! Explore the traditions of giving gifts that show we care; what other things do people give or do when trying to begin a friendship (or at least end a feud!).

MR WINTERGARTEN'S DIARY

As an extended piece of writing-in-role, composing Mr Wintergarten's diary

entry for the day Rose asks for her ball back could be a rewarding challenge. To do it real justice, you would need to revisit the key moments, talk them through at some length, and perhaps get more deeply into the character through freeze-frames or mime with thought-bubbles (as above) and hot-seating. Consider providing a shared plan of the content to ensure they include Mr Wintergarten's shock at Rose's arrival, the food he was eating at the time, his feelings about

his response to her, his reaction to the cakes, his thoughts as he started to play with her ball, and what happened next. Most importantly, there would need to be an in-role reflection on the new (and surprising) turn his life has taken. But make sure children understand that the final transformation that we see in the last illustration would be in the days or weeks ahead; perhaps this could be included in the diary as plans for the future.



Products to help improve the teaching of handwriting in schools.

> www.theprintsite.com/freesample-pack and grab your full FREE sample pack

ncluding a whiteboard in your choice

of tramline style.

Our "tramline" based teaching resources enable pupils to rapidly improve their core handwriting skills through KSI and KS2. They really help with letter formation, ascenders and descenders, cursive writing and the regulation of letter sizing.

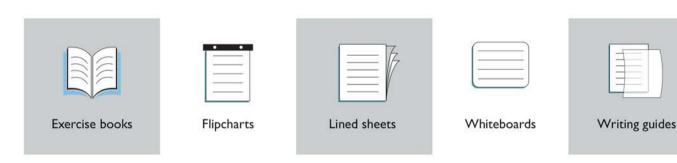
OUR FOUR RANGES

Choose from four distinct ranges of tramline based handwriting lines.



PRODUCTS AVAILABLE

In each range, we offer all these products in multiple line spacings for delivery from stock in 2 days. Check out the full stock range at www.theprintsite.com/products/handwriting-range



SHOP NOW + SAVE 10%

Save 10% on any order placed by 30th June – use discount code 10% DISC at checkout, or when placing order.







Only £4.99

Want to raise literacy standards with ease?

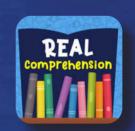
Discover 1000s of high-quality resources with a monthly subscription to Plazoom



For just £4.99, receive all this and more:

- ✓ Up to 1,500+ top quality downloadable literacy resources – covering every objective in the English PoS – with more added every week
- Our Real Writing curriculum: 25 high-quality model texts to use across the year, covering all the NC writing objectives for your year group
- Our Real Comprehension curriculum: 9 powerful model texts (3 per term), fully resourced for your year group to accelerate progression
- Outstanding literacy CPD support, including 2 video training courses and 80+ bitesize teaching guides
- Remarkable resources from superhero brands, including *The Beano, The Week Junior* and *Animal Planet*
- Access to our huge webinar archive and live literacy training every term

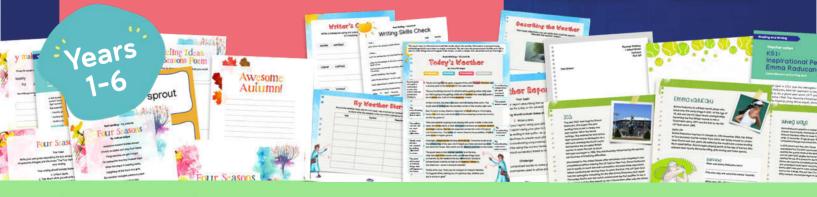






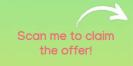






Ready to explore the range?

Visit plazoom.com/offers/monthly-offer today!







Transform Your Outdoor Space!

- Outdoor classrooms and canopies
- MUGA
- Climbing frames

your FREE













Call 01933 665151 or email enquiries@timotayplayscapes.co.uk to book your FREE CONSULTATION timotayplayscapes.co.uk



It's in the script...

Well-formed, clear handwriting doesn't just look good – it's an indicator of improved outcomes, well beyond the end of KS2

SUE DRURY

any of us will have grown up – or even started teaching - in the days when there was a sort of 'take it or leave it' approach to handwriting. As long as you could read what had been written, no one really minded (or so it seemed). Nowadays, of course, we understand that it really does matter; the ability to write legibly at speed lessens cognitive load, leading to better learning which is at least one reason why it's required for 'at expected standard' by the end of KS2. In which case, here are some ideas to make sure your class toes the elegantly flowing line....

Know the expectations

The first thing you need to understand is what the expectations are. Essentially, you need to look at the teacher assessment frameworks (TAFs) for writing at the end of KS1 and KS2. Not surprisingly, you'll find the most prescriptive lists of requirements in the KS1 TAF.

'Working towards expected level' is about forming lower-case letters with the correct size, orientation, placement, starting position and finishing position. 'Expected standard' throws capital letters into the mix, and 'greater depth' standard includes evidence of the horizontal or diagonal strokes needed to started joining letters. By the end of KS2, pupils are required to produce legible joined-up writing, and maintain this when writing at speed for those working at the expected standard.

Stretch and challenge

Try giving pupils who struggle sensory materials with which to practise, such as trays of sand or shaving foam. You should also be alert to pupils who adopt left-hand writing. Thankfully. we're long past the days when teachers used to force children to use their right hand. Even so, writing with the left hand can raise challenges, so special resources may be needed; this is where your SENCo should come into their own. At the other end of the scale, don't feel bad about encouraging a high achiever

to focus on correct letter formation.They will thank you in the end.

Model excellence

It is vitally important for pupils to see you using correct letter formation whenever you are putting pen to paper. So, if you have slipped into any bad habits over the years, or even if

you have simply spent
so much of your life
typing that you
have lost your
pen-wielding
muscle memory,
make sure that you

work hard to get your skills up to scratch.

Joined up thinking

Teaching cursive writing should be a natural extension of what has gone before, as correct letter formation involves finishing a letter in the perfect place for flicking across to the next. The better handwriting resources provide templates that allow the pupil to either stop at the end of the letter or start making the diagonal or horizontal strokes needed to join some letters.

Insist on good habits

Make sure your pupils have got a good grip on their pencils and, if necessary, get special grips or triangular pencils to help. Check that they are sitting properly, holding the book or paper with their free hand and not slouching. If the expectation is that they join their letters, make it a requirement, even if it takes them a little longer at the beginning - they will soon pick up the pace. Once they are able to demonstrate consistently good pencil work, reward them with a pen licence. Soon enough, everyone will want one!

Practise, practise, practise

Make time to practise handwriting, especially in the earlier years. Use worksheets or books with special guidelines to promote the correct size and placement of letters if necessary. Just make sure your pupils are clear which parts of which letters should go where – as this can be rather confusing to the uninitiated.

By helping your pupils to develop neat, well-formed handwriting, you'll be doing them a favour for life. **TP**

3 RESOURCES TO SUPPORT BETTER HANDWRITING



bit.ly/PlazoomHW1

This 'rules for writing' display pack will remind Year 1 pupils exactly what is expected of every sentence they write



bit.ly/PlazoomHW2

Phase 5 phonics worksheets with plenty of handwriting practice included



bit.ly/PlazoomHW3

SSW practise worksheets with the opportunity to demonstrate correct letter formation



Sue Drury is literacy lead at Plazoom, the expert literacy resources

website. Find more advice at plazoom.com/blog

Subscription order form

Air Business Subscriptions, Rockwood House, 9-17 Perrymount Road, RH16 3DW

Please sta I DIRECT DEBIT 6 issues for £29.9 CHEQUE/ CRED 8 issues for £32.9 PLEASE INVOICE 16 issues for £79.8 DELIVERY/INVOICE	99* - save 25%. PIT CARD 12* (1 year) CE ME 85 (2 years)		
Nursery Name			
Address			
	Postcode		
Daytime No. Mob	ile No.		
Email			
1 INSTRUCTION TO YOUR BAN SOCIETY TO PAY DIRECT DEE		DIRECT	
Name and full postal addre		Originator's ID No. 677186	
Building Society			
To the Manager Address		Instruction to your Bank or Building Society Please pay Aceville Publications Ltd Direct Debit from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee. I understand that this instruction may remain with Aceville Publications Ltd and, if so, details may be passed electronically to	
Name(s) of Account Hold			
Branch Sort Code		my Bank/Building Society.	
Bank/Building Society Acco	ount Number		
Signature(s)			
Data Banks and Building Societies may	/ not accept Direct Debit instruc	tions for some types of accounts	
I enclose a cheque made	£39.92 £79.85 payable to Teach Primary sa Mastercard / DATE:	E164F Amex Switch/Maestro EXPIRY DATE	
*This is a UK Direct Debit offer issue. If your subscription is a You can also subscribe via che withdrawn at any time. Photoc or contact customer services i will not include cover-mounted.	gift, the gift and gift card eque or credit card. This i copies accepted. Cancell for more details. Please	d will be sent to the donor. is a limited offer and may be ation policy applies, refer online note: Overseas subscriptions	

subscription where appropriate

Your details will be processed by Aceville Publications Ltd (publishers of Teach Primary Magazine) in full accordance with data protection legislation. Aceville Publications Ltd may wish to contact you with information about other services and publications we provide which may be of interest. Please tick the relevant box below if you ARE HAPPY to receive such information by Post \square Phone \square Email \square . Aceville Publications Ltd will NOT share your personal details with anyone else.



Written by the UK's leading teachers and pedagogical experts, Teach Primary provides an authoritative, topical look at current issues in the world of primary education

Subscribe to *Teach Primary* magazine for all these great benefits:

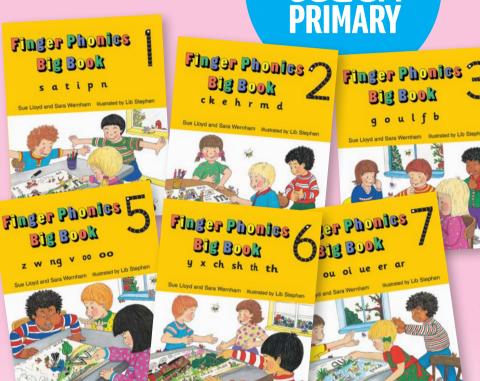
- 8 issues a year
- 30 exclusive lesson plans dedicated to literacy, history, science, maths and more
- 8 topic specials covering research, CPD, assessment, history, geography, RE, STEM, health and wellbeing, maths and music
- Tips and advice from leading experts of organisations such as White Rose Maths, Education Policy Institute and Oak National Academy
- Giveaways worth over £8,000



SPECIAL OFFER

FREE* JOLLY PHONICS Finger Phonics Big Books 1-7

when you subscribe to



WORTH

- The Finger Phonics Big Books 1–7 enable teachers to introduce all 42 letter sounds to the whole class.
- Each 16-page book has a teacher's introduction as well as exercises that the class can do.

estacaq regatt

- Each set of the seven books comes with a wipe-clean plastic sheet that can be clipped onto the page.
- This can be used by both teachers and children to write words and letters to complete the exercises.

Subscribe today and enjoy:

- Access to exclusive digital resources and special offers
- Free time-saving lesson plans from creative and outstanding teachers
- Insight and opinions from leading UK columnists
- An entire section dedicated to teaching English
- Details of outstanding schools and behaviour management

2EASYWAYS
to subscribe...

- 1 giftstoyou.com/TP-subscription
- 2 0800 904 7000 Quote: E164

*Terms and conditions apply, see online for full details. Freephone lines are open Monday-Friday 8am-6pm | aceville@dctmedia.co.uk



Book

We review five new titles that your class will love







Sunshine at Bedtime by Clare Helen Walsh, ill. Sally Soweol Han

(£7.99. Storvhouse Publishing)

One Tiny Dot

by Lucy Rowland, ill. Gwen Milward (£6.99. Templar)

Big Hedgehog and Little Hedgehog Take an Evening Stroll by Britta Teckentrup

(£10.99 HB, Prestel)

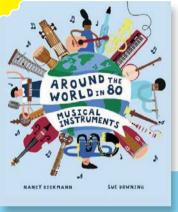
Bedtime can be tricky at the best of times, and a lack of sleep leads to very grumpy pupils. If your class are starting to ask questions about why it's not necessarily dark at bedtime anymore, this book will help you explain. Follow Miki and Mummy on their adventure across the world as Mummy introduces Miki to how the Sun works, how the Earth turns, and what happens to our sunlight through the year. The traditionally painted images from Sally Soweol Han add a dream-like quality to the story, perfectly matching the narrative. The book also includes some extra facts about the Earth's journey around the Sun, and why everything we have, from food to books, relies on the star. On top of all that, every copy sold in the UK will provide a donation to the Rays of Sunshine children's charity.

Kindness can seem like a tiny thing, but when you put some energy into it and give it some space, it can grow bigger than you would ever imagine. This sweet story tells the all-important tale of how, with something as simple as a smile, we can grow kindness until it takes over. Not only an essential lesson for our youngest learners, this book could also be used throughout primary levels as a reminder on treating others well, or to address how we can overcome anger and sadness. Readers who may prefer to follow the pictures will enjoy trying to find the Tiny Dot at the beginning of the story, and exploring how it grows and grows as the pages go on. Told in rhyme, this book could also be a great prompt for older or more able pupils to try writing their own poems about kindness, exploring what it means to them.

'It was getting late. Big Hedgehog and Little Hedgehog were on their way home. The sun was low in the sky, and its last rays shone through the leaves. So begins this beautiful tale of caregiver and child moving together through the world, with the latter reminding the former to slow down and revel in the wonders that surround us. The latest title from the author of last year's gorgeous meditation on anger, I See Red, the collage-style illustrations perfectly complement yet another timely topic from Teckentrup, and will be familiar to anyone who has attempted to walk any length with a young child who is constantly finding new things to investigate. If you're having a busy day, I can highly recommend taking a deep breath and settling down with this story - in school or out.



KS2





Around the World in 80 Instruments by Nancy Dickman, ill. Sue Downing

(£14.99 HB, Wellbeck Publishing)

A visual celebration of the huge variety of instruments played around the world, this easy-to-digest non-fiction title features everything from the piano to the pūtātara. Split into sections by type, wade through percussion, strings, and wind instruments, concluding with the truly 'weird and wonderful'. Though each spread is colourful and informational, it's the stunning fold-out centre spread that really steals the show. The pages unfurl to reveal 'A musical family tree' that shows every instrument in the book laid out in sections. The tree shows subcategories (percussion includes both idiophones and membranophones, for example), so you can differentiate information depending on pupils' ability and/or interest. Definitely one for the reference section.

Maybe...
by Chris Haughton
(£7.99, Walker Books)

Life is full of decisions. Whether high-stakes or low, we make thousands of them every day. But sometimes, picking which route to take is easier said than done. In Chris Haughton's humorous picturebook, we get a glimpse into the lives of a group of monkeys who are left to their own devices, and although they want to be virtuous, the call of delicious mangoes proves a little too much to handle. Whether you've got children in your class who have a little bit of an impulse-control issue, or you're just discussing how we should conduct ourselves in everyday life, this is the perfect title. Filled with simple but stunning illustrations also by Haughton, and bringing just a bit more danger than his previous work, this is sure to be a winner. Perfect for fans of Oh no, George! and Shh! We have a plan.

Meet the **AUTHOP**

CHRIS HAUGHTON ON MAKING DECISIONS, AND THE POWER OF PICTUREBOOKS



What was your inspiration for Maybe...?
A few people have said to me over the years, 'Oh your books are so sweet,'

and picked up on how there's no real element of danger in them. So, I'd been thinking about that, and wondered what would happen if I actually put in some danger in. Then quite a lot of it was about how to hype up the tension with new elements, too. For example, how I should integrate the tigers so they didn't just pop up out of nowhere – that's one of the joys of picturebooks, that you don't need to rely on just words, but you can introduce important elements through the illustrations, too.

Possibly your most well-known book, Oh no, George! turns 10 this year. Do you see Maybe... as kind of a follow-on to George's story? Yeah, I do. It's kind of a version of George, but with danger. I think what makes them both work is some kind of internal conflict. We can all identify with those tricky decisions, and that's what makes it funny, too. It's like the story form of the Marshmallow Test!

How would you like teachers to use *Maybe...* in the classroom?

I think there are a couple of nice lessons. One of which is that even though the monkeys do end up making a poor decision, we - as readers – forgive them. There's something interesting there, I think, about how even when we make a mistake, there are ways we can make up for it and move on. And more broadly, I worked with the CLPE a little while ago on their Power of Pictures programme, which delves into critical thinking through picturebooks. If teachers are interested in how they can use titles like Maybe... in a bit more depth. I'd definitely recommend looking it up at tinyurl.com/ tp-PowerOfPics

Maybe... (£7.99, Walker Books) is out now.



Trusted advice and resources you can rely on, no matter what comes your way





The Key for School Leaders is the only support service trusted by over half of all schools in England as they navigate each and every challenge thrown their way - even the ones they don't see coming.

We welcome you with 12 months for the price of 9.

T&Cs apply





Photo by Johan Persson © Disney

Top of the class

Resources and activities to bring fresh inspiration into your classroom

Best foot forward

Join us on 22 June, when thousands of schoolchildren aged 4-11 will take part in Brake's Kids Walk a short, supervised walk to share important road safety messages. You'll get a free action pack, including lesson plans, assemblies, activities and posters featuring Shaun the Sheep. Brake's Kids Walk is a great way to inspire and engage children about the dangers they face, and raise awareness among parents and the wider community about the need to protect

brake.org.uk/kidswalk

children on roads.

Register today:





High-quality geography CPD

Designed to provide affordable, high-quality geography CPD for teachers to use in school with their colleagues, each of our CPD packs contains a wealth of practical activities that are flexible to suit your context, the amount of time that you have available, and your school's needs. These digital packs contain a pdf overview document with guidance on activities for 15 minutes, one hour or half a day, and a link to a downloadable resource folder containing a stimulus text, a PowerPoint to direct your session, notes, supplementary resources and a completion certificate.

geography.org.uk/cpd-packs

Think outside the box

Prim-Ed Publishing is a provider of primary school resources in the UK, offering curriculum-focused teaching resources, covering all areas of the DfE National Curriculum and the CfE in Scotland. Our boxed products, including The Comprehension Strategies Box and The Maths Box, are designed as whole-school learning resources. They have been extremely popular in the education market, both here and internationally. We also have a wide range of photocopiable resources in the areas of English, mathematics, science, STEM, history, geography and design and technology. Download your free sample pack at

prim-ed.co.uk/sample-packs-download





Do you want to build a snowman?

Prepare to fall in love with Disney's Frozen all over again, as a brand-new theatrical experience arrives in London's Theatre Royal Drury Lane - winner of seven WhatsOnStage Awards. Incredible special effects, stunning costumes and jaw-dropping scenery bring Elsa and Anna's journey to life in a whole new way. Frozen is brought to the stage by an award-winning creative team and features the cherished songs from the original film alongside new songs by Grammy® and Academy Award-winning writers Kristen Anderson-Lopez and Robert Lopez. Visit frozeneducation. co.uk for a range of free lesson plans, enrichment resources, and information on in-person workshops.



Little entrepreneurs

The Fiver Challenge will run from 6 June – 1 July 2022, providing primary-aged pupils the opportunity to research, create, plan and run their own business with a £5 pledge in just four weeks! A highly interactive free programme, the challenge will develop subject-relevant and core enterprise and financial education skills across the curriculum or as a standalone project. With the opportunity to enter competitions, win great prizes and be featured in the Fiver Showcase. Visit fiverchallenge. org.uk to access resources throughout the academic year and participate in this year's challenge.





each case:



How can we help those children who are slow to produce writing? Alice Waverley, ECT

There could be several reasons why pupils may be slower to complete their writing tasks, so the first challenge for us as teachers is to try and identify what is happening in

- Lack of confidence? Some children worry about writing things down. They feel pressured to get all spellings correct and make sure that their handwriting is perfect, as well as covering the list of features you might want them to include. Lots of reassurance and positive praise will help. Remind them that it is OK to make a mistake, and model this yourself during shared writing.
- Poor writing stamina? During lockdowns. some pupils may not have written at length and so will need to rebuild their stamina. Give children a fun topic to write about, for example their dream pet, and ask them to write for one minute, two minutes, etc, about that topic. Encourage them to write continuously for the set time and reassure them that it will not be marked. Gradually increase the duration.
- Handwriting difficulties? Some pupils may find it physically difficult to write due to poor fine motor skills, resulting in writing being slow and also sometimes difficult to read. Check with your SENCo about resources or interventions that you may have available at school, and build activities into lessons to develop fine motor skills. Try finger gym activities such as threading, dough disco, using tweezers or hand gym, to work out the smaller muscles in children's fingers.
- Processing issues? Auditory and visual processing difficulties could hinder a pupil's ability to write quickly. If you feel that this may be the cause, seek support from your SENCo and discuss the available support. Visual aids when planning writing, or recording sentences using a dictation app could be beneficial.

A right royal celebration

Whatever your feelings about the Royal family, there's no doubt that this year's Platinum Jubilee represents an impressive milestone in its history - making Queen Elizabeth II the longest reigning monarch in British and Commonwealth history. 70 years is a long time in anyone's book; but to a primary-aged child, it can be literally unimaginable.

This special resources pack encourages pupils to put the Queen's reign into context, using beautifully illustrated timeline cards to order events and advances that have taken place while she has been on the throne, and comparing technology across the decades. There's the opportunity for further research, too; as well as the potential for a really inspiring wall display in the run-up to the official celebrations in June.

FREE RESOURCE Download it at bit.ly/PlazoomPlat





Ideas, techniques and resources

- · Queen Elizabeth II was the first woman in the royal family to become a full-time active member of the British Armed Forces.
- · She was the first monarch whose coronation was televised (277 million people around the world watched!)
- · The Queen has owned more than 30 corgis.

more ideas for royal lesson planning

'The Queen and the [⊥]Royal Family' – Year 2 writing unit (nonchronological report) bit.ly/PlazoomQueen



'The Platinum ∠Jubilee' – KS2 comprehension pack with text, questions and answers

bit.ly/ PlazoomJubcomp

'The Platinum Jubilee' – KS1 comprehension, vocabulary and history timeline resources



bit.ly/PlazoomJubKS1





Print your own...

...book review templates! Inspire a love of reading in your school by encouraging children to share what they've enjoyed with their peers. There are three printable book review templates provided (KS1, LKS2 and UKS2), plus a 'Fantastic Reads!' bookmark, designed to be written and placed inside books displayed in the class or school library. Follow the link to download and print yours, for FREE.

Find them at bit.ly/PlazoomReviews



If we want children to produce their very best writing, we need to expose them to as much fantastic writing by other people as possible. One way to do that is to share great books together as a class; but what if you are trying to teach a specific objective or genre? Plazoom's WAGOLL text types collection of resources features dozens of beautiful model texts across a wide range of genres, with supporting materials to help children identify features, then plan and write their own versions. Explore the full collection at

bit.ly/PlazoomWAGOLL

For an even deeper dive into what great writing really looks like, turn to Plazoom's Real Writing programme with texts commissioned from published children's authors to cover the full writing curriculum from Y1-Y6. Take a look at bit.ly/PlazoomReal



Before becoming a novelist, Lisa worked as a broadcast assistant for BBC Radio 2 and **CPL Productions.**

Her debut novel, The Goldfish Boy, was published in 2017 and went on to become a bestseller, as well as being shortlisted for many awards including the Carnegie Medal.





Coming up with new ideas for characters is one of the most enjoyable - and challenging - tasks facing established authors and young writers alike. In this episode of the Author in Your Classroom podcast, award-winning writer Lisa Thompson talks about her latest novel, The Graveyard Riddle, explaining how she 'magpies' ideas all the time, in case they might one day end up in a story. What's more, the accompanying resources pack contains everything you turn your pupils into 'story magpies', too!

Listen to this episode and download your free teaching resources at bit.ly/PlazoomLisa

Hack your class!



Need evidence for assessment?

Arm your TA with sticky notes to record pupils' answers during whole-class discussion. You can then save key responses to show individual pupils' understanding.



Go retro!

Forget high-tech solutions - an old-school clipboard could be the answer to keeping you organised. Planning, answer sheets, group lists, pens, post-its and stickers all in one place - bliss.



The no-seat seating plan...

Give pupils their own spot to sit in on the carpet. You'll save time... and can control who is sitting near to whom.

CARE SUPPORT SERVICE





We provide support, respite and home care to families who have children aged 0-19 with congenital heart defects or feeding issues across the North West of England.

- All staff are Enhanced Child DBS Checked
- Minimum of 2 hours support each week
- CQC Registered and fully insured
- Fully trained support workers (Hoist, Meds, Suction, CPR, Vent etc)

This service is free to access for families who do not qualify for a funded care package from local authorities or CCG's. To refer a family or indeed yourself please get in touch or complete our simple Referral Form online.











MICHELLE NICHOLSON



o you ever wonder why the number two is written with a w or why we pronounce the words paid and said differently? If you do, the chances are that - like me - you find the complexities of the English spelling system intriguing and absorbing. The chequered history of this country leaves its legacy in our rich language, although the wealth of vocabulary it bequeaths can be the root of the spelling difficulties that some children experience.

With approximately 40 phonemes (speech sounds) versus 250 possible grapheme correspondences in the English language, it is a rather involved process to master all the possible variations. To many, the English spelling system may seem hostile and unpredictable – and consequently difficult to teach. With this in mind, here are some practical ways that

you can support children to internalise these spellings:

Isolate the tricky part

Even the most exceptional spellings have some predictable grapheme-phoneme correspondences (GPCs). Begin by asking the child to identify these parts of the word – the *s* and *d* in *said*, for instance. Map these onto a phoneme frame and add in the tricky part, perhaps in an alternative colour, like this:

s ai d

Now support pupils to focus on remembering the irregular part, perhaps using some of the following strategies:

EXPLORE ETYMOLOGY

I find that children are often as fascinated as I am by the word origins that influence seemingly random spellings. Let's take *two* as an example again. While its homophone to has the alternative variant of the oo phoneme (/u:/) spelled with one o, there is seemingly no logic to this word having a silent w in the middle. Not until you explore the history of this word, that is. From the Old English words twa and twegen representing the number that is 'one more than one', this number shares roots with other European languages including dwa in Polish, två in Swedish and zwei in German. The word twain has still just about survived in English, but we no longer hear the w sound that used to be pronounced in two. However, when we consider other words that are analogous www.teachwire.net | 83

this word. grapheme such as: he. me. she. we correct spelling option. case. Try to include 84 | www.teachwire.net

(such as twelve, twenty, twin, twice and between) we can make an exciting comparison that may help to secure the spelling of

FIND ANALOGIES

When teaching common exception words, try to group them with other words that share the target could, should, would wild, mild, child/kind, find, mind This enables children to spot patterns in words and secure several words at once. Help pupils to explore connections in meaning, too, especially when there can be distraction homophones in the mix: here, there and where all have a link to position which might help children trying to select the

EXPLORE MNEMONICS

The key to mnemonics is to keep them simple and useful. Let's take the word *because* as an example. Children may remember that big elephants can't always use small exits', but what if their spelling of use begins with the letter y or the word *always* is also tricky for them? And pupils may find it hard to hold onto all seven mnemonic words while they construct the target word. Instead, focus on the tricky part: 'ause' in this

> the word in the mnemonic to lessen cognitive load, e.g. a memory trigger for the word people could be: people eat omelettes, people like eggs. Sometimes a rhyme can help as well,

> > such as

'there is no

'a' in they'.

FIRST 100 HIGH-FREQUENCY WORDS

The, that, not, look, put, and, with, then, don't, could, a, all, were, come, house, to, we, go, will, old, said, can, little, into, too, in, are, as, back, by, he, up, no, from, day, I, had, mum, children, made, of, my, one, him, time, it, her, them, Mr, I'm, was, what, do, get, if, you, there, me, just, help, they, out, down, now, Mrs, on, this, dad, came, called, she, have, big, oh, here, is, went, when, about, off, for, be, it's, got, asked, at, like, see, their, saw, his, some, looked, people, make, but, so, very, your, an

Source: highfrequencywords.org

GROW AUTOMATICITY

'Sight' learning is not a helpful strategy. Because there are so many words, often very similar in appearance, most children won't be able to memorise too many in this way. However, overlearning, with a view to automaticity, is the key. Constant revisiting and writing will cement the spelling, creating an unconscious habit that is the result of visual familiarity and muscle memory. So, set pupils challenges such as 'How many times can you write the word in joined handwriting in one minute?' It can be fun to set passwords on IT equipment as commonly misspelled words to encourage accuracy!

MONITOR CONSTANTLY

If a word is used frequently and misspelled from the outset, it won't be long before a mistake turns into a permanent habit. To prevent this, ensure errors in high frequency words are addressed promptly. If a Year 1 child spells the word they with an a five times in one week - or even in one piece of writing - and it isn't picked up immediately, the chances are you'll still be battling to undo that muscle memory in Year 5! Point out these inaccuracies from the outset and then have high expectations as a school for the correct spelling of this word moving forward.

SELF-REGULATION

Children need to take responsibility to 'seek and destroy' any words they should now spell correctly. I like to have a list of words for each year group, mistakes from which are no longer acceptable or 'past their sell-by date'. Words on this list become 'non-negotiable' and should be monitored by the pupil and self-corrected. Pupils can make a little bookmark for their writing books with a list of up to six words that they need to check. Once they have mastered a word, they can remove it from the bookmark and add another challenging word. Allow time for 'proofing pitstops' at frequent intervals where children can check for misspellings and missing punctuation. It is much easier for pupils to spot these in smaller chunks of writing than to wade through a finished composition. Provide common exception word lists and mats to assist the children with their independence.

HAVE FUN WITH WORDS

Above all else, it is important that children learn to enjoy words and spelling; to see the process as a fun code to crack rather than a battle to fight. In the words of the eminent linguist David Crystal, "The story of the English writing system is so intriguing, and the histories behind individual words so fascinating, that anyone who dares to treat spelling as an adventure will find the journey rewarding." TP



Michelle Nicholson is a teaching and learning adviser for **Herts for Learning**

and the author of ESSENTIAL spelling.

The Everyday Guide to Primary Geography: Maps

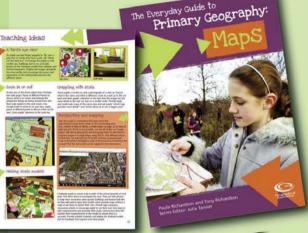
This Guide explores the potential for introducing maps and mapwork to stimulate, enliven and enrich geography teaching at key stage 1 and 2. It includes a range of practical activities and classroom strategies designed to develop pupils' knowledge and understanding both about maps and the messages maps provide

about the real world. It also identifies the possibilities for cross-curricular



The Everyday Guide to Primary Geography

series aims to encourage active 'curriculum making' in geography by providing stimulating ideas that can be adapted, extended or modified to meet the needs and interests of individual classes and schools. All the activities are 'tried and tested' and demonstrate how everyday and easily accessible resources, used creatively, can enhance and enrich pupils' geographical learning.



For more information about this series go to the GA's online shop: www.geography.org.uk/shop



ACTIVE KIDS DO BETTER!



Active Kids Do Better equips teachers and parents with tools to get primary aged children moving through play. It features a suite of free resources including videos, activity cards, games and teacher materials.

AVAILABLE FOR FREE TO ALL PRIMARY SCHOOLS



GET THE RESOURCES **ACTIVE KIDS DO BETTER** IS ABOUT MAKING LITTLE CHANGES **BOTH AT HOME AND AT SCHOOL**

#ActiveKidsDoBetterUK dlc.com/TP856



History, Geography



WHAT

- The key features of Antarctica's unique land and sea scape
- The role of historic explorers and modern scientists
- Comparison across geographical locations and historic time
 - Endurance and fortitude

Explore the legacy of Shackleton's **Endurance**



Rediscover Antarctica and delve into the history of the ship's recent discovery, with

Steve Brace



♥ @RGS_IBGschools ☐ rgs.org/schools



100 years ago, Shackleton's ship – the Endurance - was crushed by ice and sank to the bottom of the Weddell Sea in Antarctica. Against the odds, Shackleton famously saved all his crew. In March 2022, the Endurance 22 expedition discovered the ship's remarkably preserved wreck, three kilometres beneath Antarctica's frozen seas.

Few teachers and pupils could have failed to be moved by this discovery. It reveals more than just a shipwreck, opening up new opportunities for primary pupils to discover Antarctica's unique environment, and an unsurpassed story of human endeavour and endurance.

The crew of the 'Endurance' taken on the bow. Imperial Trans-Antarctic Expedition 1914-1916 (Weddell Sea Party) Frank Hurley



Georgia on the base map.

Ask your class what evidence they can find to confirm that Antarctica is the world's coldest. windiest and least populated continent. You can introduce some facts about the region using resources from the Royal Geographical society on climate (tinyurl.com/ tp-AntarcticaClimate), and seasonal change (tinyurl.com/ tp-SeasonalChange). Some interesting findings include that temperatures can fall to -94.7C, windspeeds can reach 350km/hour, and some of the continent's ice is 5km thick!

display based on the plants and animals that live in Antarctica. These span phytoplankton (a plant) to krill; fish to crabeater seals; and penguins (but no polar bears!) to killer whales. Pupils could use this interactive food web (tinyurl.com/ tp-FoodWeb) to arrange their display to show 'who is eating who' in the Antarctica ecosystem. Also get them to consider that when people visit Antarctica, they are often surprised how quiet the landscape is, but that many different types of noises

Children can then create a

Pupils will need secure knowledge of the location and geographical characteristics of Antarctica, as one of the world's seven continents.



In groups, ask the children to use atlases and maps (paper or online) to identify Antarctica's location. They should follow the lines of latitude southwards from the equator (O degrees) to find the south pole at 90 degrees south. If they use a globe, they will also see that all the lines of longitude converge at this point. The south pole is located in every time zone, though the polar bases typically use the time zone of their country of origin (so the time in your classroom will be the same as in the 'Halley' British Antarctic research base).

MAIN LESSON

1 ICE AND KILLER WHALES

Now, let's explore the

continent's key geographical features which can then be added to an individual blank base map (find a template at tinyurl.com/tp-BaseMap). These features should include Antarctica's latitude (90 degrees south) and the position of the south pole, the Antarctic Peninsula, Ross Sea and Weddell Sea and their respective ice shelfs, the Southern Ocean, and the Antarctic Circle. Get pupils to also label nearby countries such as Australia, New Zealand, Argentina, Chile, the Falkland Islands and South



can break the silence. Children can listen to some of the animals featured in their food web on an interactive slideshow at tinvurl.com/tp-Sounds (You can hear the sounds and reveal what is making them using the orange buttons on the bottom right of the slide.)

2 EXPLORERS AND **EXPEDITIONS**

In the late 18th century, Captain Cook and his crew were recorded as the first people to travel across the Antarctic Circle at 66 degrees south of the Equator. There were subsequent expeditions during the 19th and early 20th centuries, which are outlined on a timeline at tinyurl.com/ tp-AntarcticTimeline

Can pupils place other famous events with which they're familiar on the timeline? How long ago was Shackleton's expedition in comparison? This is a good contextualisation exercise.

The story of Shackleton and the Endurance can be retold in stages to your pupils through this first person narrative from the RGS (tinyurl.com/

tp-ShackletonNarrative) or by reading the book Shackleton's Journey by William Grill, Pupils might also explore their own motivations for wanting to travel to Antarctica today and the motivations of scientists and tourists who currently visit this continent. What were Shackleton and his crew looking for? Did they complete their mission? What would you take with you from camp if, like Shackleton's party, you could only carry 2lbs (500g)? You can use simple scales to explore what items the crew might have had, and what they would have had to leave behind due to weight.

Conclude this section by looking at news coverage from the recent discovery of the ship's wreck by the Endurance22 expedition. Learn more about the discovery at endurance22.org

3 DOES ANYONE OWN **ANTARCTICA?**

When Shackleton and other historic explorers travelled to Antarctica, they set out to make territorial claims. But does anyone 'own' Antarctica

today? Can your pupils answer the question 'is Antarctica a country?' What are the characteristics of a country? Get them to think about features such as having a flag, government, currency, national anthem, borders or people that identify with a nation. Does Antarctica have any of these?

Seven countries -Argentina, Australia, Chile, France, New Zealand, Norway and the UK - have previously claimed part of the continent, but some parts still remain 'unclaimed'. Ask the children to suggest ways for how countries can work together to manage this continent and for what purpose. To start them off, you can discuss the Antarctic Treaty (tinyurl. com/tp-AntarcticTreaty), which was signed in 1959 by 12 countries and recognises 'that it is in the interest of all mankind that Antarctica shall continue for ever to be used exclusively for peaceful purposes'. The treaty sets the rules for how Antarctica can be preserved and how certain activities, such as military operations, mineral exploration, and the killing of or interference with native animals and plants, are strictly prohibited.

To relate the treaty to pupils' lives, get them to decide what rules they could agree so that something they all share (such as their playground) can be used fairly and looked after. Are these kinds of treaties and agreements a good idea? Why?

Steve Brace is a former geography teacher and is now Head of Education at the Royal Geographical Society. Follow Steve on Twitter @Stevebracegeog

Use Shackleton's experience of carrying on in the face of adversity and rescuing his crew as the basis of an assembly or PHSE lesson. What must Shackleton have felt like? Did he have a responsibility to his team? What was their role in the escape? In history, pupils can compare and contrast significant figures, such as explorers, identifying similarities and differences in overlapping Venn diagrams. Ask the children to identify the key features of Shackleton's life and work and compare these with explorers from contrasting times and other cultures. Find some famous figures at tinyurl. com/tp-Explorers To tie in D&T. follow Darrell Wakelam's instructions to make your own Endurance out of a paper plate and straws. Find a video tutorial at tinyurl.com/

USEFUL

tp-EnduranceModel

- Where is Antarctica located?
- What motivated people to explore **Antarctica?**
- Shackleton's family motto was 'By endurance we conquer'. How did his actions demonstrate this?
- How do countries work together to care for Antarctica today?

History



WHAT THEY'LL LEARN

- To identify features that have changed and those that have stayed the same since the park was first opened
- To suggest reasons why these changes occurred
- To begin to understand why the park is a significant place in their locality
- To use visual sources of evidence to reach conclusions about their area in the past

Life in the past lane – focus on local history



Instead of far-flung places, try engaging pupils in the through their own familiar spaces, says **Bev Forrest**

Mathematical Methods

Local history is still the Cinderella of the subject in many primary schools. It's frequently completely forgotten at KS1, and in KS2 (if included at all), it's often just a brief reference in a more general topic on the Victorians or Tudors. Teachers seem to think they need to introduce their pupils to 'wow' places like castles and stately homes, overlooking the amazing potential for learning right on their doorstep. This lesson will support you on how to enable your KS1 pupils to successfully explore their immediate locality. Based on a study of Small Heath Park near the centre of Birmingham, the suggested approaches provide a model for you to adapt the learning opportunities to your own local park.



START HERE

The hook is looking at an image of the park from the past. This would need some identifiable features so children know what they're looking at, but



will hopefully include some less familiar points of intrigue too.

Introduce a game to help pupils explore the image and study the features closely. For example, can they count the number of children? Can they find the lady wearing a big hat? Ask them what they can see in the picture and begin to introduce them to the names of some of the features in the park as it was. Then ask them where they think it is and why.

MAIN LESSON

1 WHERE AND WHEN?

Once the children understand that this is their local park. the next step is to put it in context in both place and time. Firstly, provide pupils with opportunities to look at modern maps of the area. This will support those that may be unfamiliar with the park and also provide opportunities to link to work in geography. Next, introduce them to the class timeline and explain you are taking them on a journey beyond living memory. Place the opening of your park on the timeline. Most of our parks were established in Victorian or Edwardian times and were often

created on land bequeathed by wealthy landowners and businessmen. It was often the female members of these families that were particularly concerned about the impact of overcrowding, and wanted their workers to take part in more healthy pursuits. Small Heath Park opened in 1879 as a gift from Louisa Ann Ryland, who inherited the family metalworking business.

2 | EXPLORING IMAGES

Ask children to study large historical images of the park. Depending on the park and sources available, you could have different groups looking at different aspects and areas of the park. Old postcards make a brilliant source of evidence and are easily accessible to

"Never mind wowing your class with castles and stately homes, there is amazing potential for learning right on your doorstep."



© Mohammed Jamil

purchase or view via local history society websites. Allow pupils time to look at the details. It is worth asking them what they notice first and then move them on to the next feature. If there are children or animals in the picture, they are always of immediate interest. Next, look at photographs of the same area today. The class can then begin to identify what is in both images and what has disappeared or been replaced. Laminating the photographs means the children can annotate directly on to the image, too.

3 | WHAT'S CHANGED?

Ornamental and boating lakes were popular features of Victorian and Edwardian parks. You can sometimes find images of these lakes being used for ice-skating, and Small Heath Park even had its own open-air swimming pool. While many of these original features have disappeared due to safety concerns, they often leave intriguing clues as to their existence. Park lodge buildings usually remain, but are now private residences rather than the home of the park keeper. There are also some enduring features meaning the children can explore continuity. Look for large paths edged by ornamental flowerbeds where people would promenade on Sundays. There may also be bandstands and bowling greens remaining. You could ask the children why they think things have changed, then revisit their ideas later when looking at other types of evidence.

Bev Forrest is a primary teacher trainer. She is chair of the Historical Association Primary Committee and author of Rising Stars History.

- Over the course of the unit, pupils will investigate other sources besides photos. When you are looking at the park in more recent times there is plenty of potential for oral histories. You could also use written sources like diary entries or advertisements. You might even find an old list of rules for your park.
- At some point during the study the children should visit the site. This could happen near the beginning with the children making their own archive of photographs to use in lessons.
- There may be statues and memorials in your park, which introduce your class to significant local people, and events in the past.
- Discuss the differing fortunes of the parks over time, and why people in the past were very dependent on them for their leisure. Is the park used for different activities now? Why?

USEFUL

- Which parts of our park have remained the same?
- Why do you think they haven't changed?
- Would the park be more important for people in Victorian times than for people in our area today? Why?
- Would you prefer to play in the Victorian park or in our park today? Why?



- To use a wide range of drawing tools to create different marks
- To draw with confidence from imagination and from observation
- Begin to control the types of marks made by a range of media
- To describe the work they create and the work of others
- To use a sketchbook to explore new ideas and experiences

The art of mark-making - tiger fur!



Explore a range of media in sketchbooks to help children create their very own fur prints, with Mandy Barrett



gomersalprimaryschoolart.blogspot.co.uk

Drawing can be a daunting task for many children, so it is vitally important that their first experiences are filled with awe, wonder and a good sprinkling of fun. Drawing can link to many parts of the curriculum or can be a standalone art lesson, where learners can develop a wide range of skills. Inspiration can come from the children's imagination, or they can observe the world around them. In this session we'll look at a wide range of ideas to develop drawing in Key Stage 1 linked to the Chinese Year of the Tiger, and the beloved children's book, The Tiger Who Came to Tea.



START HERE

Begin the lesson by encouraging the children to talk about the drawing materials they have already used and which ones they prefer. (Pupils may



look back through their sketchbooks to recall the drawing tools they tried before.) Ask them to draw a tiger using a chunky Lyra graphite stick, pencil or other drawing tool that is familiar to them. Once the drawings are complete, ask the children to share their work with their peers and encourage them to openly chat about the experience of drawing and what they feel about their work.

MAIN LESSON

1 WHAT DOES A TIGER **LOOK LIKE?**

Start by encouraging children to look at a range of drawings and photographs of tigers, and talk about the features they can see. You can use The Tiger Who Came to Tea as a familiar example. Can pupils describe the shape of the ears? Does a tiger have whiskers? What shape are the eyes? Ask the children to draw another tiger using oil pastels, asking questions as they begin the drawing process. What do the pastels feel like to use? Which colours will you select? Can you compare them to the drawing tools used at the start of the lesson?

After the drawings are

complete, ask the children to compare the two drawings they have created so far and encourage them to describe the drawing process. Did they make any changes to their drawing style in their second picture after looking at the range of photographs? Why?





2 SUPER FURRY **ANIMALS**

Now ask the children to focus more closely on the fur of the animal. You can use macro photographs, teddy bears or even 'tiger fur' fabric for inspiration. Ask pupils to discuss how the fur feels and how they might use drawing marks to carefully represent it in their pictures. Use a visualiser or gather the children together to demonstrate using oil pastels to create the illusion of fur on the page. Place a photograph on the sketchbook page and begin making marks around the image to represent the fur. Encourage the children to explore making marks of different lengths and lead them



to continue considering what tiger fur looks like as they are working.

Next, get the children to recall their colour mixing knowledge. What colour is tiger fur? Which primary colours do we need to mix the shade for it? Using powder paint, ask the class to

mix a range of oranges. For pupils who need more support, demonstrate beginning with yellow paint and gradually mix in small amounts of red. Ask the children to document each type of orange they make on their sketchbook page, and prompt them to consider how to use their brush strokes to emulate tiger fur. What happens if you use fast hand or arm movements to make the marks? What will happen if we change the size of the brush? What will happen if we hold the paintbrush in a different way?

daunting task for

3 BRANCHING OUT

Once the children have explored creating a range of oranges on their sketchbook pages, add black poster paint into their pallets. Suggest using a different tool to create black stripes on their markmaking page. What do you think it will it be like drawing with a twig dipped in the black paint? How will this be different to mark making with a paintbrush or pencil? Allow pupils time to explore using twigs. If there is time and you have the facilities, the children could even find their own stick in the school grounds. Ask them to describe the sounds made by the twigs as they are pulled across the page, and allow time to carefully explore creating marks on their sketchbook pages.

Mandy Barrett is a specialist art teacher and SLE at Gomersal Primary School in Cleckheaton, West Yorkshire.

- 2022 is the Year of the Tiger! Ask the children to recall the story of The Tiger Who Came to Tea or the Chinese New Year story, which depicts why the animals were chosen to represent the different years.
- Ask the children to describe the different marks they have made on the page and discuss the ways in which they have created them. Do they have any preferences, likes and dislikes?
- The children can now draw a tiger using any drawing media of their choice, but get them to carefully consider how they are going to add colourful marks to show that the tiger has fur.
- Place all three drawings together and ask the children to review their work. Do they feel that their drawing is improving with time? What did they find challenging and what are they proud of?

USEFUL QUESTIONS

- What can we use to create different marks when we are drawing?
- What does a tiger look like and which materials can we use to draw one in our sketchbooks?
- Do you think your marks look like tiger fur?
- How could you use the same paintbrush to make both thick marks and thin marks?

NUMERACY/LITERACY

Sumdog maths and spelling

Personalised games-based learning and online practice in numeracy and literacy



AT A GLANCE

- Game-based, adaptive learning activities for KS1-3 maths and KS1-2 spelling and grammar
- Developed by educational experts
- Aligned with the National Curriculum
- Allows teachers to set tasks and focus efforts
- Provides detailed feedback to teachers while adapting to pupils' individual learning needs







Without a doubt, online services have secured an important place in school life, and Sumdog has impressively staked a claim to a significant part of that territory.

Even so, if there's one thing that Covid lockdowns have taught us about education, it's that there is no substitute for quality, in-class teaching. Some will claim exceptions to that rule but, by and large, pupil progress suffered from the necessary imposition of virtual lessons.

Nevertheless, technology does have a role to play in embedding understanding. Many years ago, while some rather sniffily complained about children being more engaged in video games than books, others learned from it. They saw that a bright and imaginative presentation is appealing. They noticed that rewards don't necessarily have to be tangible. They realised that an element of competition is often a good motivator. They also recognised that children like having a sense of progress and achievement.

Sumdog has skilfully woven all these elements into their extensive offering - and a lot more besides. Driven by a mission to narrow the attainment gap, they provide engaging, game-based practice in numeracy, spelling and grammar, aligned to the National Curriculum. With a range of games, covering themes from sports to fashion,

they really do have something for everyone. Most of all, these games are engrossing. It wasn't long before I was determinedly pitting my grammar skills against the world.

Given the addictive quality of these activities, and the fact that pupils can log in from any internet-connected device, you will be glad to know that Sumdog offers teachers a great deal of control over what their pupils can use it for. There is an extensive library of online tests to allow you to gauge understanding, assess progress and identify knowledge, now with over 145 tests aligned to the White Rose Maths scheme of learning and ready-to-progress criteria.

While pupils are having fun, they are also consolidating their skills and getting feedback on their successes and errors. Meanwhile, Sumdog's adaptive learning engine subtly studies their performance and guides their challenges accordingly.

The service has been developed by experts, and research suggests that it can have a measurable impact on fluency progress. As long as it is used as intended and not confused with an actual teacher, it is not hard to see why so many schools already swear by it.



VERDICT

- Visually appealing and engaging resources
- Provides targeted practice for pupils in maths, spelling and grammar
- Evidence-based effectiveness for learners from KS1 to KS3
- Intuitive and easy to use, in class or at home
- Ample support for teachers, parents and pupils

UPGRADE IF...

You want to support your teaching and learning with fun, targeted online learning practice for two core curriculum subjects

Subscriptions from £3.50 per pupil, per year. Learn more at sumdog.com





Maths-Whizz

Award-winning virtual maths tutor designed for home, school and remote learning



AT A GLANCE

- Provides maths tutoring to supplement classroom learning
- Fully online, allowing for easy access at any time
- Engages students by providing relevant content based on their educational needs
- Motivates students through immediate feedback and guided instruction

REVIEWED BY: ADAM RICHES





The Maths-Whizz Suite is a fully online offering from maths specialist solutions company, Whizz Education. Aimed at students aged five to 13, it provides teachers, learners and parents with extra support when it comes to maths.

At its centre is the Maths-Whizz Suite, made up of three core elements that work together to drive maths progress: an award-winning, Al-driven tutor; in-depth assessment and reporting tools; and a bank of high-quality resources. This three-pronged support boasts high success with proven results. Maths-Whizz claims that research demonstrates that pupils who learn with the Maths-Whizz Tutor for 60 minutes a week increase their 'maths age' by, on average, 18 months in the first year.

The courses and activities available cover 98 per cent of the curriculum, so what children learn at home will help them to thrive at school. This is what makes Maths-Whizz so valuable – it isn't trying to replace what is taught in schools; it's designed to supplement it.

Once you're immersed in Maths-Whizz you quickly lose track of how long you've been engaging with the activities. This is testament to their clever design. With endless customisation options that can be unlocked through learning, the educational games guide the user through an interactive

world of learning built just for them.

Maths-Whizz is designed on the premise that children are unique, so their learning plan should be too. It uses powerful Al technology to build a completely personalised plan, then continues to tailor it as pupils complete lessons. It's like having a teacher constantly checking for understanding. Maths-Whizz is so confident in its tutoring capabilities that it guarantees children will make progress. If they don't, you get your money back.

Teachers are empowered by an in-depth interface that gives clear information about each child's individual progress. As a supplement to what is happening in the classroom, you can adapt teaching to fit the needs of a class or even individual students. Reports can be run and printed so you can give feedback on progress quickly and efficiently. With a parent account, families can instantly understand their child's level of ability, monitor their progress and give encouragement with virtual messages, certificates and rewards.

The magic of Maths-Whizz is that students can learn anywhere, on any device. It's compatible with iPads and popular tablets, so pupils can engage with learning anywhere they have an internet connection.



VERDICT

- Offers engaging and interesting maths content
- ✓ Works brilliantly as a supplementary resource outside of lessons
- Exceptional functionality and usability
- ✓ Well-designed content that keeps cognitive load low
- ✓ Intuitive tracking and monitoring to ensure learners are making good progress in maths

UPGRADE IF...

You want a platform that helps learners through individualised activity setting to fill knowledge gaps. Consider if you have students who have gaps in knowledge from school closures.

BUDGETING

Money Heroes

A fun, free, digital game which allows primary-aged children to experiment with being critical consumers



AT A GLANCE

- Created by Money Heroes and supported by HSBC UK
- An interactive game based on a realistic scenario
- Helps youngsters to explore financial decisions
- Well-pitched for primary-aged children
- Easily available via a bespoke online platform

REVIEWED BY: MIKE DAVIES





The current cost-of-living crisis has forced many of us to be much more careful about our budgets. What better time, then, to encourage future generations to think about money in a practical way?

How often have you known children enthusiastically explain their great ideas about what they would like, whether it's for their own birthdays or perhaps through their school council suggestions? Thanks - or no thanks - to modern marketing, they seem to be remarkably aware of everything that is available. The trouble is, they rarely seem to be aware about the cost, which almost inevitably leads to disappointment.

Here's something that might help to change that. This new online game from Money Heroes gives youngsters an introduction to the realities of sensible budgeting in a fun and relatable way.

The set-up is that you are trying to organise an end-of-year school disco. You are given a budget and a number of things to consider, from the venue and DJ to optional extras such as a photographer. For each item, you are given a choice of three options carrying a low, medium and high price tag - the more impressive the offer, the more it costs.

As you compile your shopping list, the costs build up. You can rethink your choices at any point up until the last moment. You are also allowed to go over budget but that means you will have to start charging for tickets.

When the party is over, the game assesses your performance. Interestingly, it allows you to think about different ways to measure your success - profit, attendance, feedback

And, once you've had one go, you can play it again. And again. This allows you to experiment with different approaches, from cheap and cheerful to big and brash. Having tried it following my natural instincts, I replayed it by picking the cheapest options one time and most expensive ones the next, which was interesting.

The beauty of this game is that it skilfully shows how it is quite possible to come up with an answer that is both enjoyable and affordable. Then again, it does not evangelise about the benefits of soul-crushing austerity. It simply encourages children to think critically about how they spend their available funds. I know some grown-ups who might benefit from playing it too.



VERDICT

- Created by financial education experts
- ✓ Free, fun and thought-provoking
- ✓ Can be replayed using different strategies
- ✓ Helps to develop good financial habits
- ✓ Further free resources available
- ✓ Shows children it's possible to have fun and budget
- Provides a practical approach to thinking about money

UPGRADE IF...

You want to introduce pupils to the realities of responsible budgeting in an appealing, accessible and interactive way.

Money Heroes resources are available free through their online platform at moneyheroes.org.uk



music class

Essential Elements Music Class

A comprehensive music education resource built around an extensive collection of popular songs



AT A GLANCE

- Over 500 familiar songs to choose from
- Accessible through an easy-to-use online platform
- Promotes engagement through much-loved tunes
- Includes detailed lesson plans
- Meets National Curriculum music objectives







When you consider the broad appeal of music, it might seem strange how the thought of delivering it in the classroom can send a shudder down your spine. No wonder schools often rely on buying in comprehensive resource packages.

One of the latest to muscle its way onto the market is Hal Leonard's Essential Elements Music Class. This slick online platform is designed to offer a one-stop shop for primary school music activities, from assembly songs to detailed lesson plans.

What sets it apart is the way it uses its vast collection of familiar favourites as a vehicle to secure engagement. Having established itself within the US school system, it has clearly worked hard to secure the rights for such an extensive repertoire. Not surprisingly, Essential Elements Music Class (EEMC) squeezes every drop of educational potential out of each song.

It also offers a sort of karaoke mode, with or without music notation, so that children can sing along in assembly, choir practice or just because. Each song includes versions with or without vocal arrangements and comes with printable resources such as sheet music for piano accompaniment. The most

popular numbers even have dance video versions to keep the pupils moving.

The website includes all the functionality you'd expect, from a flexible filtering system to a facility for compiling your own playlists.

Possibly most welcome from a teacher's perspective is the range of meticulously planned, fully-resourced lessons, created by experts, to meet National Curriculum objectives. There are also whole-class instrumental lessons for ukulele or, if you're feeling brave, recorder. My particular favourite, however, is the music maps section which allows pupils of to gain an interactive introduction to classical and popular pieces.

EEMC comes with an impressive selection of outstanding tunes from films and musicals, but there are some curious inclusions, such as *God Bless America*. With so many songs to choose from, and with new titles being added on a monthly basis, perhaps this doesn't matter, and the platform has otherwise been well adapted for the UK. The overall sense is of a comprehensive music package that will improve teacher confidence, reduce workload and be a hit with pupils.



VERDICT

- ✓ Packed with familiar tunes
- ✓ Regularly updated collection of songs
- ✓ Expertly planned lessons
- ✓ Saves valuable time
- ✓ Facility to compile your own playlists
- ✓ Interactive karaoke mode for assemblies and lessons
- ✓ Vocal arrangements and sheet music available for each song
- ✓ Dance videos for the most popular tunes
- ✓ Boosts teacher music confidence
- ✓ Affordable price

UPGRADE IF...

You want to use the power of popular, well-loved songs to meet your music curriculum objectives.

PHONICS

FFT Success for All Phonics

Support all young learners to learn to read with this comprehensive, DfE-validated SSP programme



AT A GLANCE

- A comprehensive literacy programme
- Exceptionally designed resources that engage and stimulate learners
- A validated DfE SSP programme that meets all 16 core criteria
- Comprehensive lesson plans at every stage
- Fully decodable texts with plenty of practice and support
- Free assessment programme and parent portal included in the price





REVIEWED BY: ADAM RICHES

FFT's new Success for All Phonics is a proven systematic synthetic phonics teaching programme for Reception and Year 1. Comprised of eye-catching, well-designed resources, the content meets all of the requirements of the National Curriculum and the EYFS framework, plus it's been validated by the DfE.

The programme provides teachers with a complete print and digital package for whole-class phonics teaching, massively reducing planning time. Inclusive daily lesson plans support teaching and effective progression through a clear structure of the six phases of Letters and Sounds for reading, writing and spelling.

The lessons and resources are colourful, bright and engaging, meaning pupils respond positively and learn quickly.

FFT Success for All Phonics isn't just a resource, though. It's a part of a wider offer from FFT that includes in-depth training and support, a free parent portal, an online tutoring programme - Tutoring with the Lightning Squad – and a reading assessment programme. In short, FFT Success for All Phonics provides schools with a comprehensive offer to support every child to learn to read. Tutoring with The Lightning Squad offers pupils the opportunity to work in small intervention groups and further support their individual needs. The

additional, interactive, visual content allows classroom teachers to effectively develop those individuals who require extra guidance and time.

What stands out for me, though, is the regular assessment of children's reading skills. The feedback from all of the assessments is used to monitor progress. inform teaching and support any necessary catch-up support or intervention strategies. A new online assessment programme is included as part of the programme to do this, and is designed to be used, on average, every half-term to track every child's progress easily and quickly.

From a pedagogical point of view, FFT's Success for All Phonics adopts a unique co-operative learning approach, meaning that all pupils are fully engaged and interact for the whole lesson. Coming from tried and tested pedigree, the Success for All foundation, the teaching method is proven to have a dramatic effect on progress and attainment that is positive and long-lasting.

FFT has thought about it all in this programme and the interleaving of the assessment and additional support mean that teachers are able to deliver effective lessons and react quickly and efficiently to the requirements of the learners in front of them. Not only is the programme great, kids love it too!

VERDICT

- ✓ Hugely engaging for learners
- ✓ Highly intuitive to use for teaches, both specialist and non-specialists
- Adaptable and flexible
- ✓ Workload reducing functionality around assessment
- ✓ Training available for effective implementation

UPGRADE IF...

You are looking for a fully validated phonics programme that has effective reading assessment and monitoring of learner progress. Also consider if you want to get the added value of an effective online tutoring programme and free parent portal included in the cost.

Prices start at £600. See website for full details: fft.org.uk/phonics

A Scientist **Just Like Me**

A SCIENTIST JUST LIKE ME



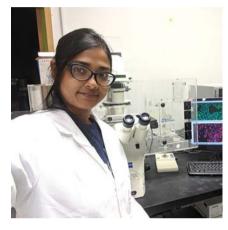


Raise awareness of diversity in science-related jobs with the Primary Science Teaching Trust's relatable free resource

AT A GLANCE

- Exciting content designed to raise awareness of scientific careers
- Developed by award-winning primary science teachers
- High-quality, job-specific information insights for raising awareness and increasing participation
- · Explains job roles in a digestible, exciting and easy to understand format







A recent report from The Ogden Trust and The University of Manchester describes the realities of primary pupils' science learning. It says that children do not get the opportunity to identify with role models and may not see science as something for them because unconscious bias and stereotypes continue to exist in displays around schools and also in outdated books in libraries. images on websites and images selected by teachers for the resources they create.

The Primary Science Teaching Trust (PSTT) has just the answer. 'A Scientist Just Like Me' is designed to raise awareness of diversity in science-related jobs and provides illustrated examples of a wide range of science-based careers from astrophysicist to zoologist and plenty of jobs in between, many of which children will never have heard of before.

This free resource consists of a series of short slideshows telling the story of a contemporary scientists and the work they do. These are hugely relatable, authentic and aspirational. A simple search facility allows you to filter according to job type, gender, ethnic heritage, LGBTQ+, disability and whether they are STEM Ambassadors. They can also be searched by different primary science topics. The person selected then shares details about their work and their everyday lives, describing their job, what they like about it, how their work makes the world a better place, and the challenges they have faced on their career journeys. The

slides also include free supporting resources and links to follow-up interest and explore

They are all very personable and down-to-earth, and keep things simple by focusing on the skills, attitudes and habits that are needed to carry out the work, rather than baffle children with science.

The slideshows are perfect discussion prompts for encouraging children to imagine and discuss what it might be like to do a particular job. These could easily be integrated into classwork as part of science, PSHE and assemblies.

It's an impressive collection that is sure to inspire and get your class thinking in different ways. It could be better still if there were videos of the scientists themselves talking but still, these are terrific insights.

The resource is timely as Ofsted's latest research review of science reminds us that a high-quality science education is rooted in an authentic understanding of what the subject actually is. This includes learning about the diversity of approaches used to establish knowledge in science and the differences between each science and the people 'doing' them for a job.

The PSTT is a shining beacon of excellence in primary science and has a wealth of expertise and this resource is well worth sharing with pupils to motivate, inspire and excite them. It promotes a range of disciplines and allows children to develop an identity with scientific jobs from an early age.

VERDICT

- ✓ Provides pupils with fascinating insights into the careers of living scientists
- ✓ A valuable resource showcasing the diversity of scientific opportunities in the real world
- ✓ Enriches awareness of possible careers in STEM
- ✓ Helps close the opportunity gaps in STEM for all pupils
- ✓ Builds engagement in science and widens access and participation
- ✓ Improves appreciation of the range and diversity of pathways pupils can pursue across the scientific disciplines
- ✓ Raises teachers' awareness of diversity, equity and inclusion

UPGRADE IF...

You are looking for a resource to drive progress and develop children's science capital, feed their ambitions, and quash stereotypes.



I in the Latte



A one-day diary from first alarm to lights out

WAKING UP

My alarm goes off at 6am but I very often wake before it. The first thing I do is check the news and any notifications on Whatsapp and other social media.



MATTHEW MCCRUM A YEAR 3 / 4 TEACHER

@gamesetandmatt



MY MORNING

My morning consists of me skipping breakfast, Well, food. I do drink water and orange juice. I'm not a coffee person and I don't have time to make tea. I get the train and usually listen to a podcast. I tend to get to school around 8am and use the photocopier before anyone else and prepare my resources for the day. Morning lessons are always phonics, followed by maths and then English.

MY AFTERNOON

Afternoons always start with the class reader - my favourite time of the day. I love reading to the children. We are currently on Mr Penguin. Later on we tend to focus on the foundation subjects, with my favourite probably being geography.



LUNCHTIME

At lunchtime, I spend some time serving the kids at the salad bar and encouraging foods that I don't even eat (I'm a villain). I will eat the school meals as they're really good. My favourite is sweet chilli chicken and noodles. I will try to read the news too so I can zone out of school.



MY EVENING

I vary the times I leave work. I will get going by 4pm on at least two days but stay longer on others. We have our staff meetings on Tuesdays so that's a long one. In the evenings, I very often have cardio tennis classes or play league tennis for my club. I also just enjoy watching tv and relaxing -RuPaul's Drag Race and Derry Girls are firm favourites.





BEDTIME

Bedtime varies. I can be so tired that I fall asleep at 9.30pm and on other days I can't get myself to sleep until nearly midnight. I know I shouldn't use my phone for a certain time before bed but I often do. I like to listen to audiobooks and Ted Talks to sleep, too.

QUICKFIRE QUESTIONS

- Career plan B? I don't think I'd be good at anything else. I did go to the Police for my work experience at school. I wanted to train the drugs dogs. That would be really exciting.
- Must-listen? My favourite podcast is called Tea with Me and it's hosted by a Northern Irish comedian called Shane Todd. NI is my home country so I really get the humour.
- Must-read? I am reading a series of books at the minute by Jeffery Deaver based on a retired forensic detective who became a tetraplegic through an accident while working at a crime scene. I love the forensic side of police cases – it's always fascinated me.
- Twitter hero? @deputypeake Emily Peake is always on the other end of Zoom if I have a question or want to discuss something about school. She also has the most eccentric and eye-catching wardrobe I've ever seen and the children in her school must love seeing her outfits each day.



Bring the curriculum to life with DoodleMaths, the award-winning maths programme!

Filled with thousands of interactive exercises

Plugs gaps in knowledge and targets tricky topics

Sparks a love of maths and promotes independent learning

- Automatically marks work and tracks progress
- Use on a range of devices anywhere, anytime

"A revolutionary way of learning"

- Head of IT, Saltford CofE Primary School









Exclusive offer: Speak to our team to find out more and receive a £25 Amazon voucher when you quote TeachPrimary22!

Book your slot by visiting doodlelearning.com/for-schools or scanning the QR code and pressing Chat to our team.





Education Endowment Foundation (EEF) Efficacy Trial:

additional months' progress with FSM struggling readers*

EEF Efficacy Trial Findings of Lexia Core5 Reading:

'The findings indicate that at the end of Year 2, [struggling] children who received the Lexia programme excelled in reading, making two months of additional progress in comparison with their peers in the control group. Also, children eligible for Free School Meals (FSM) who participated in the programme made an additional three months of progress compared to children eligible for FSM who did not receive the intervention.'

*Subgroup analysis. For full results, search 'EEF/Lexia Trial'



High security evidence rating



Low-cost intervention rating



Fidelity of implementation: 'high'

FOR YOUR FREE TRIAL

0191 482 8499 | www.lexiauk.co.uk

LexiaUK°