

Schoolscience.co.uk challenges, informs and relates learning to outside the classroom, using the expertise of our partners and providers in industry to ensure that the rich content not only covers the core science, but helps students to understand how science works.

There is an enormous amount of colourful and useful free material, which can be downloaded to use in worksheets and lesson plans. To take just one example, the resource from the ABPI on *Solids, Liquids and Gases* has 15 sets of worksheets, teachers' notes, a quiz and animated cartoons.

Did you know that copper and its alloys are powerful antimicrobial agents? Read about how two kindergartens are leading a movement to replace frequently touched surfaces in schools with equivalents made from copper alloys that will continuously kill microbes: <http://www.schoolscience.co.uk/coppernewsfromathens>. Why not get your students to use this article as a basis for a letter to the NHS Chief Executive, Simon Stevens, suggesting how UK hospitals should be refurbished with antimicrobial surfaces? The Copper Development Association has produced a series of enrichment resources in partnership with ASE, ideal for supporting online learning: <http://www.schoolscience.co.uk/search-results?categoryid=83&cc=gb>

For younger learners, why not visit the Practical Action Home Learning pages? <http://www.schoolscience.co.uk/practicalactionhomelearningresources> These provide great project ideas for children working at home or in the classroom.

For example, why not get your children to build a floating garden for an area of the world that is subject to regular flooding?



Concerns about students missing A-level physics practical work can be partly addressed using the Virtual Physics Laboratory (VPL): <http://www.schoolscience.co.uk/thevirtualphysicslaboratory>, which offers a suite of 27 interactive physics simulations. This suite of virtual physics practical exercises allows the user to take ranges of measurements over a wide variety of simulated practical

activities, from Rutherford's alpha scattering to measurements of Planck's constant using LEDs. Although not a substitute for hands-on practical work, VPL offers a great reinforcement tool.

The Association of the British Pharmaceutical Industry (ABPI) resources support:

- remote learning
- flipped learning – why not get your GCSE students to work through a section of work on microbial resistance at home, and explore the implications back in class? <http://www.schoolscience.co.uk/antimicrobialresistance>



For a list of ABPI resources, links to the ABPI website and a brief description, visit: <http://www.schoolscience.co.uk/search-results?categoryid=77&cc=gb>

schoolscience.co.uk

Schoolscience has a wealth of material – all checked for suitability and regularly updated by the ASE Content Editor to check for safety and accessibility.

New content is added to Schoolscience regularly – keep checking the site for updates!

The interactivity and animation mean that it never feels like schoolwork!



The Handy Hand Washing Handbook

By Darren Raddell and Seamus Hilley

Price: £2.99 (there is no member discount on this book)

ISBN: 9780993279652



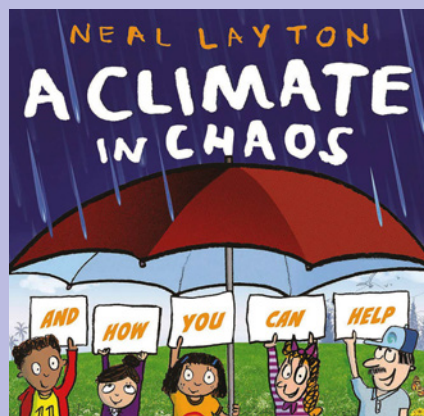
There's nothing handier than a *Handy Hand Washing Handbook*. The rhymes in this medically approved children's book hilariously explain when, how and why we wash our hands.

A beautifully illustrated, fun and informative book which reinforces how important it is to wash our hands properly and keep nasty germs at bay.

All books are available from www.ase.org.uk/bookshop

Please log in to your account before reaching checkout in order to obtain your membership discount.

A Climate in Chaos: And how you can help



By Neal Layton

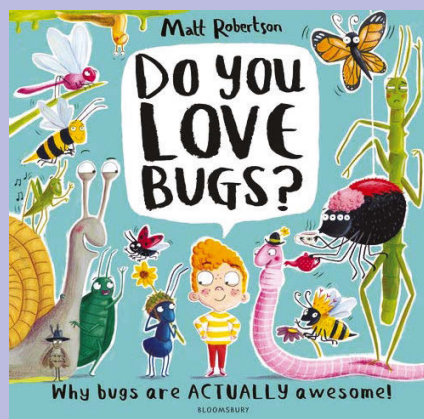
ISBN: 9781526362315

You've probably heard about climate change. At least I hope you have - because it's REALLY IMPORTANT. It affects all of us living on Planet Earth right now, and everyone and everything that will live on our planet in the future.

Our world is warming up, and it's a big problem. Award-winning author-illustrator Neal Layton is here to explain what climate change is, what's causing it and why it's dangerous for animals and humans alike. But he's also FULL of ideas for how you can help! From eating lots more veggies to walking and cycling and thinking carefully about what we need to buy, *A Climate in Chaos* will get young readers excited about how they can make a difference to keep Planet Earth happy.

This brilliant non-fiction picture book, illustrated in Neal's trademark collage style, is perfect for readers aged 5-7 who love nature and want to help the environment.

Do you Love Bugs? Why bugs are actually awesome



By Matt Robertson

ISBN: 9781526609519

Crawly! Hairy! Maybe a bit scary? Snails slime upside down. Eeek! Worms can somersault and butterflies smell like cake. YUM. Wait, don't eat them... Because bugs are truly BRILLIANT! Matt Robertson's quirky text and sweet yet hilarious illustrations show

exactly why minibeasts can be truly awesome in their own unique way.

The book includes 14 hilarious globally inclusive, bug-tastic spreads, featuring worms, bees, beetles, dragonflies, butterflies, moths, grasshoppers, spiders, ants, snails and stick insects. Find out how honey bees make their honey, why moths always fly around lamps and how bombardier beetles protect themselves from hungry predators. There's something new to learn about each bug. Did you know that stick insects can dance? Or that butterflies can smell like cake? And guess what? A grasshopper will spit on you if it gets angry!

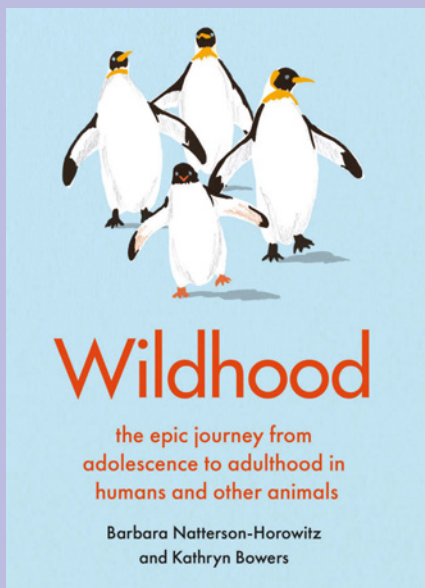
So always be good to grasshoppers, give spiders a smile not a screech and never get angry at ants! There are so many more fun facts to uncover about our tiny furry and slimy friends.

The ASE Book of the Year Award Shortlist 2020

All four shortlisted titles are soon to be available from the ASE Bookshop
www.ase.org.uk/bookshop



Wildhood. The epic journey from adolescence to adulthood in humans and animals



By Barbara Natterson-Horowitz and Kathryn Bowers

ISBN: 9781912854660

Teenagers: behind the banter, the tediously repetitive games and clicks, the moping and screaming, the fast living, and the jockeying

and preening lie the rules of the entire animal kingdom. Based on their popular Harvard University course, latest research, and worldwide travels, Natterson-Horowitz and Bowers examine the four universal challenges that every adolescent on our planet must face on the journey to adulthood: how to be safe, how to navigate hierarchy, how to court potential mates, and how to leave the nest. Safety, status, sex, and survival.

For parents and children, predators and prey alike, this is a powerfully revelatory book, entertainingly written. To become, as its reader does, for a while, a young penguin or a young humpback whale, or even an octopus tapping a shrimp on the shoulder or an orca silencing their victim, is a giddy experience. The authors open up horizons for their ordinary human readers as they go about their daily animal lives, and permit them to look afresh at the confusing and exhilarating experience of adolescence. Even your average teen will not get bored.

Fantastically Great Women Who Saved the Planet



By Kate Pankhurst

ISBN: 9781408899298

From bestselling author and illustrator Kate Pankhurst, descendent of Emmeline Pankhurst, comes

another 'smart, informative, inclusive and accessible' book about trail-blazing women (Fiona Noble, The Bookseller). This time, it's women who have been making decisions that have helped protect our natural world from way before it was on a political agenda. Discover their untold stories.

Tackle the plastic problem with Isatou Ceesay by recycling waste into beautiful objects. Marvel at the intelligence of chimpanzees with Jane Goodall. Learn why it's important to shop fair trade and cruelty-free with Anita Roddick and The Body Shop. Resist devastating deforestation and plant seeds of change with Wangari Maathai.

We're in an age when young people like Greta Thunberg are calling for those in power to 'wake up' and take action. But everyone has a part to play. Written with hope and encouragement, this book shows that all actions, big and small, can be powerful in the fight against climate breakdown.