What have the trees ever done for us?

Globally we are losing about 18 million acres of forests annually, equivalent to 27 soccer fields every minute. They are cut down to make way for housing and agriculture and for timber. But why does it matter? Why do we need trees?

Well, they help us breathe for a start, turning the CO₂ we breathe out into O₂ which we breathe in. They also remove huge amounts of CO₂ from the air and store it as wood. They provide habitats, prevent flooding and positively affect our mental health.

About 1 in 5 plant species on Earth are estimated to be endangered and the Millennium seed bank at Kew is trying to make sure that as many species as possible are preserved for ever.

Some plants however can’t be stored as seeds so botanists are using a new technique of cryopreservation to protect species like the oak tree.

Satellite images show the scale of deforestation in Cambodia where land is being cleared to grow food for a growing population.

Why do we need trees?

Deforestation
Millennium Seed Bank
Test Tube Trees
Climate Change

Natural Rectangles?

When we think of naturally occurring shapes we usually think of hexagonal honeycombs and snowflakes, circular tree trunks and spherical planets and moons.

We usually consider rectangles and cuboids to be man-made and it’s rare to find them in nature.

Which makes this rectangular ice slab in Antarctica particularly unusual. Discovered by a NASA flyby it caught the eye of scientists among 100s of other ice slabs that have broken away from a larger sheet of ice.

What is an Iceberg?
Rectangular Icebergs
Ice Shelf Flyby

PSTT Children’s Conference at PSEC

PSEC is a major international primary science conference taking place in June 2019 in Edinburgh.

The Children’s Conference has a climate change theme and is about schools sharing their work internationally. Register your interest to download the free Teachers’ Project Pack.

Register your interest here

topicalscienceupdates@gmail.com

Climate Detectives is a brilliant new ESA school project for 8-15-year-old pupils. Students are challenged to make a difference in understanding and protecting the Earth’s climate.

The closing date to sign up is November 15th so get your investigation plan in quick to be part of this great initiative.
As science coordinator in a large primary school I constantly come across outstanding resources that I share with my staff and other schools in the area. Over the years I have featured some of my favourite resources in Topical Science Updates which I hope you find useful.

The resources featured below are some of my current favourites and I regularly use all of them to enhance science teaching in my school. I don’t get anything for publicising these resources apart from the satisfaction that they might help schools take their science to the next level.

**Whizz Pop Bang** is one resource I couldn’t do without in school. We have a monthly school subscription, I have a personal subscription too, and the children can’t get enough of it.

The new Whizz Pop Bang **Teaching Resources** are an outstanding addition to a brilliant resource. Linked to the National Curriculum and Curriculum for Excellence these downloadable practical lesson plans are excellently researched and written for teachers.

**Wow Science** was created by Primary Science Teaching Trust (PSTT) and Learning Science Ltd. It provides links to the best primary science learning materials on the web. It is an outstanding tool for teachers and all resources have been approved by the PSTT for quality and suitability.

**Explorify** is a fantastic resource for 7 – 11 year olds covering the whole science curriculum through a wide variety of activities. There are images and videos to inspire discussion and scientific thinking, practical activities to engage your children and

The Twig World suite of resources is simply spectacular. Covering every aspect of science through engaging video clips and activities, along with practical ideas. There is a dedicated site for each age group of children, from 4 – 7, **Tig Tag Jr**, 7 – 11, **Tig Tag**, and 11+, **Twig**.

On top of that they offer 2 free resources, in partnership with Imperial College London; **Reach Out CPD** has 20 minute modules covering the science knowledge teachers need to effectively deliver any area of the curriculum, and **Reach Out Reporter** is a Topical Science service which used video clips and other resources to bring today’s science alive for pupils and helps teachers integrate it easily into their classrooms.