

**Science! When the Newsletter started, I thought Maths would be the hardest subject to cover – boy was I wrong! I always look at the curriculum before I start so that the items are relevant – hopefully that’s been achieved as science is such a broad and wide subject, so please dip into a selection of experiments, videos, articles and external resources, all with elements of SMSC. As usual, the activities have been added to our Newsletter Grid, please click ‘Filter View’, choose Science from the subject menu. Apply the filter and then click ‘Save to PDF for a closer look.**

### **Experiment with Science**

The word Science always invokes an image of test tubes with bubbly liquid inside (in my mind anyway) – here are some great experiments that help with all aspects of the subject guaranteed to create some **fascination awe and wonder** along the way.



#### **Weather - Rain in a Jar**

<http://www.schoolofdragons.com/resources/rain-in-jar-view>

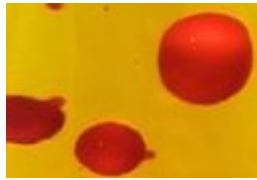
#### **Types of Soil in the garden**

<http://www.ecofriendlykids.co.uk/simple-soil-experiments-for-schools.html>



#### **Liquid Separation**

<https://sciencebob.com/try-some-lava-in-a-cup>



## Air Pressure

<http://www.science-sparks.com/2014/05/26/air-pressure-experiments-for-kids>



Here are some more links to dozens of cool experiments – already highlighted but worth exploring

<http://www.schoolofdragons.com/resources>

<https://sciencebob.com/build-a-soap-powered-model-boat>

## Morals in Science

Science can definitely invoke some **fascination, awe and wonder** in all of us and inspire **imagination and creativity in learning** however, as these links show, the **investigation of moral values and ethical issues** has played a huge part in some scientific breakthroughs.



The first, the Helsinki Declaration is a list of recommendations to abide by when conducting experiments on humans (I didn't know this existed – it's probably a good job it does) [www.upenn.edu/regulatoryaffairs/Documents/Declaration\\_Helsinki.doc](http://www.upenn.edu/regulatoryaffairs/Documents/Declaration_Helsinki.doc) This next link is an article regarding animal testing (each company testing on animals has to provide their own declaration) <http://www.aboutanimaltesting.co.uk/controversy-of-animal-testing.html>

Some scientists know the risks and continue – this excellent article by Edward Teller, the inventor of the hydrogen bomb highlights the **understanding of the consequences of actions**, <http://science.sciencemag.org/content/280/5367/1200>



To aid in that understanding, here's some interesting scientific reasoning for keeping the earth's temperature steady. <https://www.carbonbrief.org/scientists-compare-climate-change-impacts-at-1-5c-and-2c>

Each one of these examples of moral concern will lead the reader to **develop and express personal views or values**.

Gridmaker

### Food Chain – from the top, down



Could the introduction of one species affect a whole eco-system? This video tells the story of how the introduction of fourteen wolves to Yellowstone Park changed everything – it's amazing and well worth a look. <http://americancherokee.us/the-y-released-14-wolves-in-a-park-but-no-one-was-prepared-for-this-what-happens-next-is-a-miracle-and-proves-that-we-must-take-care-of-our-amazing-planet.html>

### Biology – Colour Blindness

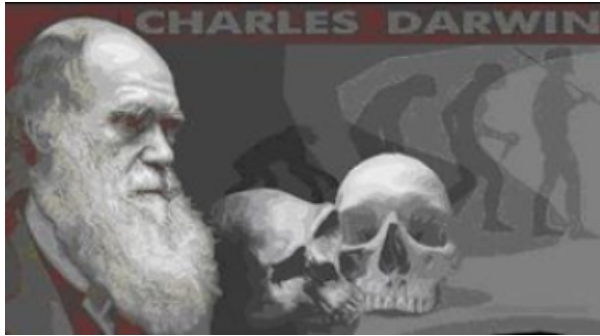
This section was actually inspired by an advertisement for a pair of glasses that correct colour blindness, however, looking into why some people are colour blind and how it affects them, the reactions of people wearing the glasses are totally understandable. <http://www.colour-blindness.com/general/how-it-works-science>



... and here's the advertisement – scroll down for the video and there's a colour blindness test on this site.

<http://enchroma.com>

## Evolution



*Did you know...* Charles Darwin wanted to be a Doctor but he couldn't stand the sight of blood!

As evolution covers every living thing on the planet, here are 66 interesting facts about evolution <https://www.factretriever.com/evolution-facts>

Back in time: 18th June 1858 Charles Darwin receives from Alfred Russel Wallace a paper that included nearly identical conclusions about evolution as Darwin's own, prompting Darwin to publish his theory. <http://wallacefund.info>

## iAbacus – Evolved self evaluation and improvement planning



Computers have had a massive impact on how we live and work – it seems like there's an App for everything. On the whole this massive leap in technology makes our lives easier and when it comes to self evaluation and improvement planning, iAbacus definitely does just that.

Take a look at how iAbacus evolved from a paper based working model to the online evaluation and improvement tool it is today.

[iAbacus Website](#)

[iAbacus for SMSC](#)

Going Global



Off to New Zealand for this one – Rene Smith is a scientist who created this website and has over 4 million visitors per month – dip in and you'll see why. It loaded with games, quizzes, fun facts and projects - <http://www.sciencekids.co.nz>

## Happy Accidents

How about some accidental scientific discoveries

<https://scienceonthego.griffith.edu.au/accidental-discoveries-0>



## Events



## June is LGBT Month

<http://lgbthistorymonth.org.uk>

5th June - World Environment Day

<http://worldenvironmentday.global>

8th June – World Ocean Day

<http://www.worldoceansday.org>

25th June - Eid al-Fitr

<https://www.activityvillage.co.uk/eid>

**Did you know ....** Did you know that you can share the grid with parents and visitors? All you need to do is give them guest access or add your grid to the school website. If you're interested - just get in touch with [support@opus.org](mailto:support@opus.org) and we'll send you instructions





## External resources



Science and school in partnership

<http://www.ogdentrust.com/>

School holiday camps in certain areas and after schools clubs

<http://www.madscience.org/uk.aspx>

Dry Ice Fun

<https://www.chillistick.com/schools.html>

Finally .....

Whilst researching the newsletter I also discovered that apparently swearing makes you stronger – let's just keep that to ourselves, shall we.

<https://www.theguardian.com/science/2017/may/05/strong-language-swearing-makes-you-stronger-psychologists-confirm>



Bye for now

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\*Previous editions of our Newsletter can be found on our website