

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.





Types of Soil in the garden

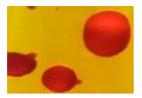
http://www.ecofriendlykids.co.uk/si mple-soil-experiments-forschools.html Weather - Rain in a Jar

http://www.schoolofdragons.com/re sources/rain-in-jar-view



**Liquid Separation** 

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



#### **Air Pressure**

http://www.sciencesparks.com/2014/05/26/air-pressureexperiments-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

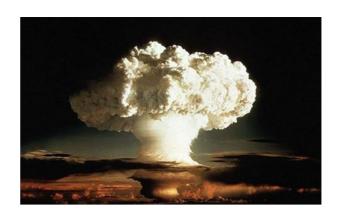
Science can definitely invoke some **fascination**, **awe and wonder** in all of us and inspire **imagination and creativity in learning** however, as these links show, the **investigation of moral values and ethical issues** has played a huge part in some scientific breakthroughs.



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/regulatoryaff airs/Documents/Declaration\_Helsink i.doc This next link is an article regarding animal testing (each company testing on animals has to provide their own declaration)http://www.aboutanimalt esting.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.or g/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-butno-one-was-prepared-for-this-whathappens-next-is-a-miracle-andproves-that-we-must-take-care-ofour-amazing-planet.html

## **Biology - Colour Blindness**

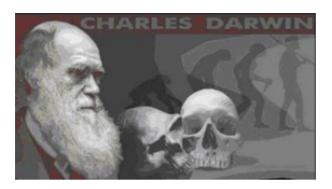
This section was actually inspired by an advertisement for a pair of glasses that correct colour blindness, however, looking into why some people are colour blind and how it affects them, the reactions of people wearing the glasses are totally understandable.http://www.colour-blindness.com/general/how-it-works-science



... 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



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.a u/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@opeus.org and we'll send you instructions

	CULTURAL Exploring, understanding and respecting diversity	CULTURAL Participating and responding to cultural activities	CULTURAL Preparing for life in modern Britain	CULTURAL: Understanding and appreciating personal influences
- After School Clubs		A A A A B 19 19 11	19	A 05 09 11 11
- Assemblies		9 AN AN AN AN AN AN AN OF ST ST S	At At 02 02 12	AH AH AH AH AH AH AH QU QU QB K
- Charity Work	Al Al 07 09 II II	66 As As 97 19	At 02 09 10 10 10 10 10 10 10 10 10 10 10 10 10	All All All 92 99 99
- Competitions	At 1	At 08 09 10 11		
- Homework Club	<u>M</u>			
- Sporting Events	10 KS3	At 10 KS3		<u></u>
- Staff Training/CPD	<u>~</u>		<u> </u>	<u> </u>
- Themed Day/Week	All 07 07 09 11 KS3 66 66 66	AL 07 07 09 09 KS0 MI MI MI	At 07 08 09 00 00 00 00 00 00 00 00 00 00 00 00	AL 07 07 11 KS0 10 10 10 10 10 10 10 10 10 10 10 10 10
- Trips & Excursions	All All 07 07 07 07 09 11 11 KS4 1	KS AN AN 07 08 11 11 KS4 MA SEN	AL 07 08 11	AL 07 07 08 11 11 11 SEN SEN
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Careers	2 1		1 1 1	M T T KS4
Design and Technology	07 07 08 08 KS3 KS4 KS4 (C)	07 07 07 07 08 00 KS0 KS0 KS4 KS4	2 KS KS	27 27 28 28 KS
Drama	97	<u> </u>		

### In the News

This month's news selection is big and fascinating. Firstly, Japanese scientists experimented on a ladybird's wing to see how it managed to fold its wings inside that little shell.

https://www.sciencedaily.com/releases/2017/05/17 0515150714.htm

Apparently our sense of smell is better than we thought

https://www.sciencedaily.com/releases/2017/05/17 0511142020.htm

Love this – pupils using science to solve a murder (not a real one).

http://www.liverpoolecho.co.uk/in-your-area/north-west-pupils-solve-murder-13035374

Why the buttercup is so yellow.

https://www.theguardian.com/science/2017/may/1 4/secrets-shiny-yellow-buttercup-plantwatch

Do stripes affect you?

http://www.telegraph.co.uk/science/2017/05/08/str ipes-modern-life-may-trigger-migraines-seizureswarn-scientists/

I've left the best till last - Tequila!

http://metro.co.uk/2017/05/07/tequila-could-begood-for-your-bones-according-to-science-6620509/





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.

# 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/scien ce/2017/may/05/strong-languageswearing-makes-you-strongerpsychologists-confirm



## Bye for now

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