

Finished your work? Let's SCIENCE!

Issue 11

9th July 2020

Key Stage 3 section: DIY phone speaker

I'm not promising great sound quality, but this DIY phone speaker will make your phone sound louder and a bit less tinny! How does it work? When your phone plays music, the sound spreads out all around, but when you put the phone inside a cardboard tube the sound is directed down the tube towards the plastic cups and out from there instead! Details on [how to make it are here](#).

Key Stage 4 section: Summer Science Online

The Royal Society is a Fellowship of many of the world's most eminent scientists and is the oldest scientific academy in continuous existence. This year they are hosting Summer Science Online featuring live and pre-recorded talks and videos for those ages 12+. The programme (**13th-17th July**) brings you free cutting-edge and historic science - all to enjoy at home.

Explore their [free to view content here](#).

Science stories this week

[Algae turn Italian Alps pink](#)

[Colour-changing ink turns clothes into giant sensors](#)

[China's bubonic plague \(The Black Death\) outbreak](#)

[Robotic scientists will "speed up discovery"](#)

[Meat and dairy production emit too much nitrogen](#)

[Giant flywheel project in could prevent UK blackouts](#)

[Miniature dinosaurs! So cute!](#)

The VIRTUAL Big Bang Fair

Most of the wonderful science fairs have been cancelled this year due to the coronavirus outbreak. However, the team that bring us The Big Bang Fair have taken the event online for one day only on **Tuesday 14th July**. Meet inspirational scientists, healthcare professionals, engineers, technicians and students who have been doing incredible things whilst working from home! You can get involved with polls, online quizzes and there are even prizes to win on the day! [Bookmark the website](#) and save the date in your calendar.

Experiments you can do at home

Olympia and her daughter Viola make a self-inflating balloon and experiment to find out which household liquids react with bicarbonate of soda (*ask an adult's permission! – Dr A*). Some fizz vigorously, others bubble gently, and some substances don't appear to react at all. This experiment can be a little messy, but that's part of the fun. [Click to see the video](#).

Citizen science

Science can produce a LOT of data. Sometimes, there is too much for the scientists to look at themselves. This is where you can help, right now, to improve our understanding of the world around us. Each week we will showcase a different citizen science project that you could get involved with.

This week's project is The Big Butterfly Count which assesses the health of our environment by counting different species butterflies and moths. [Click to join this project](#).

Science on the iPlayer

[Pluto. Back from the dead](#): From an unremarkable ball of ice to a world where some form of life might exist.

[The hidden wilds of the motorway](#): Helen Macdonald loops around the M25 to discover if it has a wild side.

[Extreme mountain challenge](#): Steve Backshall embarks on an expedition to explore Venezuela's tepuis.

Eyes to the sky

Comet NEOWISE will be closest to Earth on July 22-23, 2020. It will pass at some 64 million miles (103 million km) from our planet.

[More here](#) on how to spot it.