

Over the next term each curriculum area will be providing articles, examples of student work and other related information for the weekly Spotlight newsletter.

This week's focus is on Science and next week's will be Modern Foreign Languages

## British Science Week

### Assemblies

British Science week started off with a bang with Ms Haselden and Mrs Haley's explosive assemblies! They started things off by demonstrating "elephants toothpaste" an exothermic reaction so named because it looks like toothpaste coming out of a tube. This experiment explores how catalysts can be used to remove oxygen.

They then moved on to "cannon fire", which is an experiment that produces a spectacular amount of noise (a lot like a firing of cannons) and crackling bursts of flames this was a crowd pleaser.

The final experiment demonstrated spontaneous combustion between glycerol and potassium permanganate. As the reaction speeds up it generates large amounts of heat which causes it to catch fire this was again met with rapturous applause!



### Break Activities

During either first or second breaks the Science team ran a host of activities to encourage engagement in Science. This was kick started on Monday by Mrs Gaukroger. Mrs Gaukroger ran a series of experiments during break time around the theme of "explosions". This included competition reactions, a replay of cannon fire (always a popular one) and iodine and aluminium volcanoes. This experiment involves using a mixture of iodine and aluminium powder placed into a Bunsen flame and adding a small amount of water and washing up liquid, to produce a spectacular volcano!



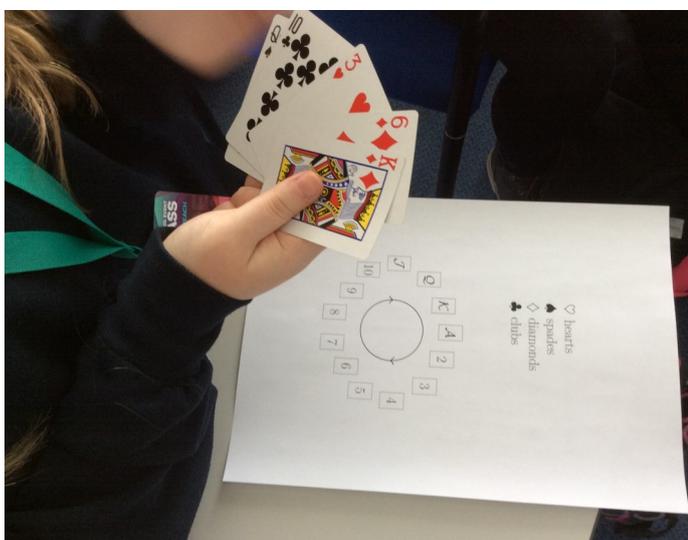
Day two of Science week involved "how acid is my rain" with Ms. Dingwall. This was looking at the environmental impact of acid rain on water samples and soil samples. The students were able to use pH testing techniques on the samples gathered across the school to investigate if St Austell's rain fall was acidic.

Day three saw Mr Martin lead the "wireless signal blockade". This involved the use of new technologies in science and looked at how to boost wireless signals and investigate how they work. To do this Mr Martin set up his own router and Wireless signal.

Friday was the pinnacle of British Science Week at Poltair School for the Big Science quiz. This involved twenty teams of 4 students (plus a member of staff), an iPad per team and the students favourite quiz based app- Kahoot. There were thirty questions based on all aspects of Science, including picture rounds and fun facts! This was the most popular event of the week with nearly 100 students, from years 7-11, taking part and the winning team receiving sweets.

## Year 9 Trip to Plymouth University

As part of British Science Week Ms. Dingwall, Ms. Brader and Mr Richards took 32 Year 9 students to Plymouth University for the day. The students were invited to take part in the Universities out reach programme designed to encouragement engagement into the Sciences. The students on arrival were given a brief tour of the University which gave them an invaluable insight into student life. They then participated in a talk by a leading professor on weird marine life- the good, the bad and the ugly. Lucy Rutland-Brown said "I loved it! It was my favourite part of the trip, I thought it was really interesting".



The students participated well and were given the opportunity to ask questions at the end. The students then spent time at two different work shops. The first of which was "maths and magic" which used a simple card trick as a mechanism to teach algorithms to programme computers. Damien Brzostek said " this was a fun maths card trick". The second workshop looked at the science behind the work of the paramedics. Which included learning how to carry out CPR and how to act in an emergency situation. Phoebe Reid said " I really enjoyed seeing what the paramedics routinely do" and Oliver Collar said" The CPR course was constructive and it gave me a skill I might use". All the students found the experience a positive one and they came away learning a lot.