

STEM and Computing



# THIS TERM

## Written by Mr Hole

Welcome to the termly subject newsletter, this term focusing on the area of STEM - Science, Technology, Engineering and Maths.

In the science rich world we live in, our STEM ambassadors have been busy promoting their subject via assemblies. A demonstration of how ordinary red cabbage water can be used to detect acids or alkalies by changing colour was conducted. Everyone was wowed by this example of simple homemade science. They have been delivering computing assemblies, spreading the Safer Internet message and making sure our Griffins know how to be safe online. If parents require further support with this then please take a look at our Web Plan Wednesdays and also our National Online Platform which a is a a free resource for all.

We have also been focusing on the diversity of people who work in STEM, and the kinds of jobs that are linked to this specialism. The Ambassdors have delivered assemblies on people who work in the STEM field and as part of the Griffin Science Symposium we have been able to attend talks by current working scientists like Dr Anne Edwards from the John Innes Centre and Dr Alice Dunford, Space instrumentalist and physicist.









#### Griffin Science symposium

One of our many proud traditions is the Griffin Science Symposium. This year the theme has been Time and Energy. The children have been able to hear from Scientists working in these key areas and carry out experiments that help show Energy and how time affects everything around us. As classes, we have been taking part in the Big Plastic Hunt, working out how much plastic we use as a country and finding ways to become more sustainable in the future.





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### <u>Griffin University</u>

My Griffin University sessions this term have had a STEM focus, looking at the themes from the Griffin Science Symposium on Energy and time. We have created cotton reel tanks using elastic bands as propulsion and tabletop roller coasters converting potential energy into movement. We have also thought about mirrors on the James Webb telescope and how they can see light from millions of years ago.

Looking forward, we are excited to be getting a 3D printer in school and this will be used for future Griffin university sessions and a STEM 3D modelling club.

Highlights of the year so far in science.





#### <u>Year 3</u>

Year 3 started the year looking at Magnets. They have investigated how Magnets have two poles and that these attract or repel each other. They have investigated materials that are and are not magnetic as well as thinking of uses for magnets in everyday life. This was followed by a topic on rocks where they looked at the different properties of common rocks as well as how fossils are made.

#### Year 4

Teeth and the digestive system were the focus at the start of the year, thinking about how to look after our teeth and how our food is digested. They then focused on different states of matter, investigating the differences between solids, liquids and gases and how materials change between them. Most recently they have been looking at sound. The focus for this has been on how vibrations are made and heard and what effects volume and pitch of sounds.

#### <u>Year 5</u>

Year 5 also started the year looking at the human body, focusing on how the body changes as we grow. Following this they looked at how materials could be combined and then separated using a range of different techniques as well as irreversible changes caused by burning and chemical reactions. Finally, they have investigated the lifecycles of different types of animals, looking for similarities and differences.

#### <u>Year 6</u>

The human circulatory system was the focus for year 6 returning in September, including the heart, lungs and blood vessels. This led into work on genetics and inheritance as well as adaptation for the environment animals live in. Their late topic has been about light and the children have been working with mirrors an investigating shadows.