

Science week!



This week has been British science week and as part of their science lessons, pupils in Lower 3, Upper 3 and Lower 4 were invited to a presentation from Dr Sam Gregson called 'Hunting the Higgs'. This was a highly interactive and entertaining show where the pupils were able to use their mobile devices to log in and collect and analyse real data from the large hadron collider at CERN, the world's largest and most powerful particle accelerator. They were looking for the Higgs boson particle which is an incredibly tiny particle linked to the mechanism by which matter is given mass.

During the presentation the pupils were introduced to high level science topics in an accessible way, and were able to use critical thinking skills to solve problems and develop their ideas. The show culminated in a mock large hadron collider collision with a huge explosion and balls flying all over the PAC!

In another of their science lessons pupils were introduced to a range of insects and reptiles kindly brought in by Matthew and Ethan who keep them as pets. Some interesting and fascinating facts were shared about the different species, and their habitats and feeding habits were explained. Those pupils who were brave enough were given the opportunity to hold or stroke the animals towards the end of the session. These included Madagascan hissing

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cockroaches and various species of mantids and stick insects to gargoyle and leopard geckos as well as Loki, the friendly bearded dragon! This event proved hugely popular with the pupils and staff alike.

Dr Geoff Bryant, dad of Seb and Emily, works for Calysta. He is the head of a department that are researching and developing an innovative way of making sustainable fish food. As part of the science week activities, he visited Gateways to talk to Upper 4 and Lower 5 about his work.

Farmed fish are traditionally fed on food pellets that are made from plants which use valuable resources such as agricultural land and rain. His team are developing a way to produce fish food from methane gas. They use bacteria that are able to digest natural gas and turn it into protein. The 'feedkind' pellets can be used to feed fish, chicken or cattle and the land used to grow crops for humans.

Our final activity takes place in few weeks' time. Danni Schroeter, R&D Manager at Ulrick & Short is visiting Gateways to look at health issues associated with high levels of fats and sugars in processed food. Ulrick and Short are a local company that develops 'clean label', functional ingredients to solve food industry challenges such as reducing fat and sugar levels or developing vegan products. Danni will be speaking to GCSE and A level pupils about how she applies her chemistry knowledge to develop innovative products in the ever expanding and demanding food market.

Mrs Sophie King, Miss Kim Ashurst, Mrs Wood and Ms Jo Raynor