



2016 Summer Science Master Class

22 students from our main feeder middle schools came to visit us on Tuesday 19th July 2016. They spent a day in the science department. Their mission was to experience biology, physics and chemistry extension activities.

The day started with Dr Jury and an investigation into the decision making abilities of woodlice. The humble woodlouse was tested in a series of mazes and environments in our attempt to understand what factors influenced its choices. No woodlice were hurt in the making and execution of the experiment, they were returned safely to the leaf litter near the science department. The morning continued with a dissection. The subject of the dissection was frogs; the frogs were purchased as dissection specimens and arrived as preserved and vacuum packed specimens. The students were fully engaged in the inner workings of the frog. They investigated the digestive system of a frog, although humans and frogs are not the same there are some remarkable similarities.



After a short break, the washing of hands and partaking of the excellent cookies and ice cold squash in the science quad area, the students returned to the laboratory with Miss Calloway for a lesson in the finer points of Rocket Science. The students investigated aerodynamics and propulsion; they built bottle rockets before testing them in the school grounds. The preferred choice of propulsion was pressurised water.

When the students finally came down from the clouds and after lunch they found themselves in the chemistry laboratory with Dr Sutton. They were going to investigate food flavourings in the form of esters. They learned about the molecular composition of these fruity smelling substances and then prepared three samples. One of which ethyl ethanoate is an ingredient in everyone's favourite boiled sweet; pear drops. The students then built molecular models of ethyl ethanoate which they were allowed to take home together with a large pear drop flavoured gob stopper which I am sure never made it home. **Redborne Science Department**

