

**KS3 and KS4** The prices below are workshop prices for classes of up to 32 pupils. Please add £3.50 per pupil admission to these prices.

**Find out with Forensics - 90 mins - £60 per session (W) - Y7**

A great way to combine practical science with collaborative skills. Pupils will work in small groups to collect evidence to enable them to solve the mystery using a variety of forensic techniques. The sessions will be held in the Catalyst Crime Lab and areas covered by the clues are: scene of crime observation, using simple soil analysis, using a microscope to match fibres, testing unknown powders, separating colours using chromatography, lifting and matching fingerprints, constructing an electrical circuit to create a burglar alarm, matching footprints, blood testing and DNA matching.

**Bridges to Schools - 90 mins - £60 per session (W) - Y7, Y8 and Y9**

Inspired by the new Mersey Gateway Bridge, close to Catalyst, your pupils will find out about Cable-Stayed Bridges. They will take on roles as engineers and need to work as a team to construct their very own 13m cable stayed bridge. Will they be brave enough to try walking across it when it's complete? *This workshop is supported by the Institution of Civil Engineers NW and is only available at certain times of the year.*

**Explore Your Universe - 1 hour - £50 per session - Y7, Y8, Y9, Y10 and Y11**

An interactive science show which aims to inspire pupils to think about the big questions being asked by people who work in physical sciences. Using equipment such as a Van de Graaff generator, IR camera and plasma ball pupils will see how exciting the physical sciences can be. *This workshop is supported by the STFC*

**Fantastic Plastic – 1 hour - £50 per session - Y7, Y8, Y9, Y10 and Y11**

Pupils will learn about the properties and applications of some interesting and novel materials including plastics known as thermoplastics. They melt and mould a thermoplastic and use it to make a key ring to take away. *This workshop is supported by Perstorp*

**Soap Suds - 45 mins - £40 per session (W) - Y7 and Y8**

Pupils will learn about the process of making soap, a product which was manufactured here at Catalyst when it was a soap factory. They will look at the history of soap making, discuss how the raw materials are combined and processed to make soap and find out how soap actually works. They then make their own bar of perfumed and coloured soap which they can take home to use! *This workshop is supported by Stephenson Group*

**Hydrogen Power - 1 hour - £50 per session (W) - Y9, Y9, Y10 and Y11**

Pupils think about challenges related to energy production and the environment and are introduced to hydrogen power technology. Each group is then challenged to construct their own miniature hydrogen powered car to help them learn how this alternative technology could revolutionise the automotive industry.

**Showering with Surfactants - £50 per session (W) - Y8, Y9, Y10 and Y11**

In this workshop pupils will investigate why we need to wash. They will explore the science behind their favourite bodywash products and find out how surfactants work before making their own bodywash/shampoo to take home. *This workshop is supported by Innospec*

**Origins: Elements from Stars - 1 hour - £50 per session (W) - Y8, Y9, Y10 and Y11**

This nationally recognised, award winning workshop takes students on a journey from the birth of the chemical elements. Through hands on activities and explosive demonstrations, pupils will discover atoms, the properties of different elements and make their own supernova explosion on a plate. *This workshop is supported by RSC CICAG and RSC HG*