Tuesday 27 September

**Electronica- Unconventional Ways to Make Music**

In this workshop you will experiment with a variety of music-making tools such as Korg’s Kaoss Pad, Yamaha’s MU10 Sampler, Zoom’s Gion Effects Processor, Moog’s Theremin, Gakken Stylophone, Mooer Pitch Box and many others. We will spend the morning learning how to use and play these amazing and unconventional instruments. Then we will use them to create our own musical sounds and phrases, culminating in a joint composition.

Wednesday 28 September

**Pulleys and Levers- Super Powered Engineers**

Could you lift an elephant with one hand? Could you lift a car onto a skyscraper? Centuries ago people made magnificent structures without the use of heavy machinery. Join us as we make some simple yet amazing machines that make us look like we have super powers.

Thursday 29 September

** Weird World- Whose Crazy Idea was that?**

Bubble gum, flying platforms, sea shoes, flexible glass, velcro, steam engines, penicillin, aqualungs, bar codes, biros, neckties, wovels and blue jeans, just to name a few! When does a crazy idea become a world-changing invention, and how can you tell the difference between the two? Delve into the fascinating and often funny history of invention and design, so that you too can
ask "Whose Crazy Idea Was That?"
Friday 30 September

**Venetian Masks**

Venetian masks are a traditional addition at the Carnival of Venice! Beautifully crafted and exquisitely worn, they capture the romantic whim in all of us! Using masking techniques, you will learn to take facial moulds in order to then design and create your own Venetian mask.

Tuesday 4 October

**Maps in the Modern World**

Can you read a map? Have you ever made a map? Take a trip into modern-day mapping and discover the awesome, interactive and digital world of cartography. Global Positioning Systems and Geographic Information Systems are a long way from folded up paper maps, and allow cartographers to use satellite data and digital maps to design, develop and print specialised maps of their own design. Map a flood, the spread of an epidemic, the use of technology, or just your very own local community.

Wednesday 5 October

**Phenominal Physics- Time and Time Again**

What is time? How does it work? Why are there days? And are they always 24hrs long? How can I tell the time? What if I don’t have a watch or even a clock? Using your new found skills, in a most ‘timely’ manner, you will discover the answers to these and many more questions. Along the way you will build your own time measuring technologies.
Thursday 6 October

**Chemical Chaos- Spectrums**

What do crystals, pigments, rainbows, prisms, light and water all have in common? I am sure you can guess – they can all play a role in colour and spectrums! Do you know what a spectrum is? Do you think you can split light? Or do you have the power to refract light? Discover the answer to these questions, plus many more when you immerse yourself in a world that is not just black and white, but full of every colour of the spectrum.

Friday 7 October

**Quiddich Cup**

The Quiddich Games are coming to SWISH. Our broomstick may not actually fly, however our Muggle version of Quiddich will be just as fun. Chasers grab your Quaffles, Beaters arm you bludgers and Keeper protect those hoops as we compete for the title of 2016 SWISH Quiddich Games Champions.