An investigation to test for electrical insulators and electrical conductors.

Lilac Class explored the question: how do electrical insulators and electrical conductors affect the brightness of a bulb in a circuit and why?

We constructed an electric circuit using crocodile clips, wires, batteries and bulbs. We tested a range of material to find out whether they were electrical insulators or electrical conductors. An electrical insulator has a high resistance and this means that it is very difficult for an electrical current or the flow of electrons to travel through it. An electrical conductor has a very low resistance and this means that it is very easy for an electrical current or the flow of electrons to pass through it, however some allow an electrical current or flow of electrons to pass through more easily than others. We found out that the copper coin lit the bulb up the brightest and is therefore the best electrical conductor!

An investigation to test Heliocentric theory – the Sun is at the centre of the Solar System and the planets circle around it.

We made sundials and placed them in the classroom so that they were facing north. Every hour we marked the shadow of the gnomon on our sundials. The shadow occurred because the sunlight was blocked by the gnomon. We observed that the shadow moved liked the hour hand of a clock. The shadow is moving because the Earth is moving around the Sun and this demonstrates the Heliocentric model in practice.