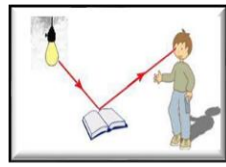




PHYSICS



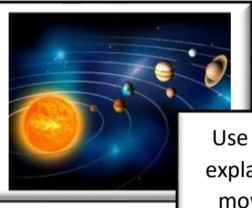
Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

Light- Why was the Industrial Revolution important to the West Midlands?

Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

Year 7



Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky.

Identify the effects of air resistance, water resistance and friction, that act between moving surfaces



Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect.

Earth and Space- What's beyond the sky?

Forces- What did Henry VIII's reign mean for Britain?

Year 6



Describe the movement of the Earth, and other planets, relative to the Sun in the solar system

Describe the movement of the Moon relative to the Earth

Describe the Sun, Earth and Moon as approximately spherical bodies

Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object

Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers

Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit

Recognise that sounds get fainter as the distance from the sound source increases.

Find patterns between the pitch of a sound and features of the object that produced it



Recognise that vibrations from sounds travel through a medium to the ear

Year 5

Electricity- Why should we protect our oceans?

Sound- Home or abroad?

Recognise some common conductors and insulators, and associate metals with being good conductors.

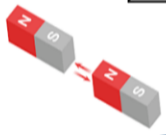
Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery

Identify common appliances that run on electricity

Find patterns between the volume of a sound and the strength of the vibrations that produced it

Identify how sounds are made, associating some of them with something vibrating

Observe how magnets attract or repel each other and attract some materials and not others describe magnets as having two poles

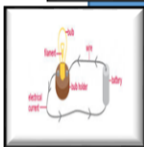


Predict whether two magnets will attract or repel each other, depending on which poles are facing.



Recognise that they need light in order to see things and that dark is the absence of light

Recognise that light from the sun can be dangerous and that there are ways to protect their eyes



Forces and Magnets- How do I use a map?

Light- Stone Age to Iron Age: How did Britain change?

Year 4

Compare how things move on different surfaces

Notice that some forces need contact between two objects, but magnetic forces can act at a distance

Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials



Notice that light is reflected from surfaces

Recognise that shadows are formed when the light from a light source is blocked by a solid object

Find patterns in the way that the size of shadows change.



Year 3



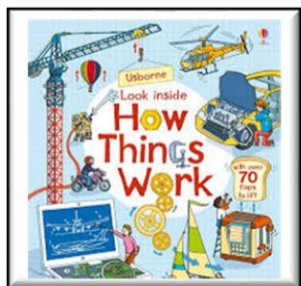
Seasonal Changes- Do all superheroes wear capes?

Observe and describe weather associated with the seasons and how day length varies.

Year 2

How do seasons change?

Observe changes across the four seasons.



Year 1

Say about similarities and differences in relation to places, objects, materials and living things. Talk about the features of the immediate environment. Make observations of animals and plants and explain why some things occur, and talk about changes.

Early learning goal- The World

Nursery & Reception

PHYSICS