



MILESTONE PHYSICS

Outcomes

<p>Electricity</p>	<ul style="list-style-type: none"> ▪ Will use recognised symbols when representing a simple circuit in a diagram. ▪ Will recognise some common conductors and insulators, and associate metals with being good conductors. ▪ Will compare and give reasons for variations in how circuit components function, including brightness of bulbs, loudness of buzzers and on/off switches, make connections with energy consumption, cost and how to minimise this ▪ Will make a useful circuit, identify some key components and their function (for example energy cell, switch) ▪ Will participate in activities which explore the impact of a switch opening and closing useful circuits ▪ Will be able to make a basic circuit, identify some key components and how they contribute to operating an electrical appliance ▪ Will name everyday items that use electricity and know how to use them safely ▪ Will be able to experience using electrical devices for a purpose ▪ Will identify common items that use electricity ▪ Will use a switch to turn electrical devices on and off ▪ Will encounter different items that use electricity
<p>Forces and Magnets</p>	
	<ul style="list-style-type: none"> ▪ Will encounter the forces push and pull ▪ Will know that the force push or pull can be used to make something move ▪ Will notice contact needs to be made for a push or pull force to happen ▪ Will be able to experience a range of forces and motion ▪ Will be able to respond to key vocabulary and know that friction can alter the force needed to move an object. ▪ Will compare how things move on different surfaces. ▪ Will notice that magnetic forces can act at a distance ▪ Will compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, ▪ Will identify some magnetic materials. ▪ Will Describe magnets as having two poles ▪ Predict whether two magnets Will attract or repel each other, depending on which poles are facing ▪ Will explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object. ▪ Will identify how forces can change under different conditions (e.g., air/ water resistance and friction)
<p>Light</p>	
	<ul style="list-style-type: none"> ▪ Will encounter different sources of light ▪ Will notice light and dark ▪ Will recognise that he/she needs light in order to see things and that dark is the absence of light. ▪ Will recognise that light from the sun can be dangerous and that there are ways to protect eyes. ▪ Will experience a range of activities which explore a range of light effects ▪ Will notice that light is reflected from surfaces ▪ Will respond to activities which explore the effects of light, dark and shadow ▪ Will notice that shadows have the same shape as the objects that cast them ▪ Will find patterns in the way that the size of shadows change ▪ Will recognise that light appears to travel in straight lines. ▪ Will 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. ▪ Will 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. ▪ Will use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
<p>Sound</p>	
	<ul style="list-style-type: none"> ▪ Will experience hearing different sounds ▪ Will explore making different sounds ▪ Will be able to compare and describe sounds ▪ Will be able to make different sounds purposefully ▪ Will experience a range of activities that explore sound and vibration ▪ Will identify how sounds are made, associating some of them with something vibrating. ▪ Will have a basic understanding of how sound travels to the ear and how it can be affected. ▪ Will respond to key vocabulary linked to sound including pitch, vibrations and volume. ▪ Will find patterns between the pitch of a sound and features of the object that produced it. ▪ Will find patterns between the volume of a sound and the strength of the vibrations that produced it. ▪ Will recognise that sounds get fainter as the distance from the sound source increases.
<p>Space</p>	
	<ul style="list-style-type: none"> ▪ Will be able to experience activities which explore the solar system ▪ Will identify Earth, sun and moon ▪ Will describe the Sun, Earth and Moon as approximately spherical bodies ▪ Will be able to name some of the planets in the solar system ▪ Will be able to identify some characteristics of different planets and the sun ▪ Will describe the movement of the Moon relative to the Earth ▪ Will describe the movement of the Earth, and other planets, relative to the Sun in the solar system. ▪ Will understand how the movement of the earth relative to the sun affects our world. (e.g. day/night, seasons)