



St Mary and St Joseph's RC Primary School
Science Map

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Physics	Light	We see with our eye (Bright Lights)		When light hits a material, some of it is reflected off the material We need light to see things Darkness is the absence of light Some materials block the light and a shadow is formed Sunlight can be dangerous The size of shadows change according to the size and shape of objects and distance from the light source (Urban Pioneers)			Light travels in straight lines We see light from a source reflected off an object into our eyes Shadows have the same shape as the object that casts them (Tomorrow's World)
	Sound	We hear with our ears Sounds can be different (Bright Lights)			Sounds are made when something vibrates Sounds get fainter the further they are from the source The volume of a sound can be changed The pitch of a sound can be changed (Traders and Raiders)		

	Electricity				<p>Electrical appliances need a source of electricity to work</p> <p>A complete circuit is needed for an electric current to flow</p> <p>A circuit is made up of different components</p> <p>A switch opens and closes a circuit</p> <p>Some materials are better conductors than others (Road Trip USA)</p>		<p>There are recognised symbols for circuits and their components</p> <p>An increase in voltage will cause an increase in current</p> <p>Some components can resist the current more than others. (Hola Mexico)</p>
	Forces		<p>Pushing and /or pulling can make things start moving, stop, go faster or slower</p>	<p>Pushing and /or pulling can make things start moving, stop, go faster or slower</p> <p>Some forces need contact between two objects (contact forces)</p> <p>When one object moves over another one there will be a force between them that opposes motion. This is called friction.</p> <p>Magnets can act at a distance</p> <p>Magnets exert attractive and repulsive forces on each other</p> <p>Some materials are magnetic, some are not (Mighty Metals)</p>		<p>Drag forces resist movement</p> <p>The force of gravity caused by the Earth pulls objects towards its centre</p> <p>Some mechanisms allow a smaller force to have a greater effect (Scream Machine)</p>	

	Earth in space	Temperature and day length changes over the year – this pattern is referred to as the seasons				<p>The Earth, Sun and Moon are approximately spherical</p> <p>The Earth is one of eight planets that orbit the Sun</p> <p>The Earth orbits the Sun once every year</p> <p>The Earth rotates on its own axis once every 24 hours</p> <p>The Moon orbits the Earth and looks different at different times of the month</p> <p>It is due to the rotation of the earth that we experience day and night</p>	
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