

# Student Inquiry – Angitutanga – Success – Term 3 – Middle Team

<p><b>Whakatauki:</b>  <b>I orea te tuatara ka patu ki waho</b>                  A problem is solved by continuing to find solutions</p> <p><b>Guiding Statement:</b>                  My actions influence my success. Choice affects the final outcome</p> <p><b>Guiding Questions:</b>                  If I change something, what happens?                  When something changes, what is the success that comes out of it?</p>	<p>The student inquiry this term is:  <b>'Physical World'</b></p> <p>We are exploring and investigating ideas about <b>everyday examples of forces and energy.</b></p>
--	--

**Below are 6 areas that we are focusing on and some simple tasks that you can try at home.**

<b>Light</b>	<p><b>Scientific Definition:</b> A type of <b>energy</b>. A form of <b>electromagnetic radiation</b> that can be seen by the human eye, eg. a light bulb.</p> <p><b>Task:</b> Draw and label objects that gives off light around your home.</p>
<b>Heat</b>	<p><b>Scientific Definition:</b> A form of <b>electromagnetic</b> energy. Heat flows from hot objects to cool objects, eg. pots and pans</p> <p><b>Task:</b> Draw and label objects that produce heat around your home.</p>
<b>Electricity</b>	<p><b>Scientific Definition:</b> The effects of an <b>electric charge</b>, eg. electricity is the force that powers a light bulb.</p> <p><b>Task:</b> Draw and label things that need electricity to make them work around your home.</p>
<b>Magnetism</b>	<p><b>Scientific Definition:</b> A physical phenomenon (<b>invisible force</b>) produced by an electric charge, that repels or attracts objects, eg. fridge door.</p> <p><b>Task:</b> Draw and label things that use magnets around your home.</p>
<b>Sound</b>	<p><b>Scientific Definition:</b> <b>Vibrations</b> or sound waves (invisible force) that travels through the air or an object to the ear, eg. music, loud or soft noises.</p> <p><b>Task:</b> Draw and label all the things you can hear around your home.</p>
<b>Movement Forces</b>	<p><b>Scientific Definition:</b> A force is a push or pull upon an object resulting from the object's interaction with another object, eg. hammer and nail.</p> <p><b>Task:</b> Draw and label objects that you need to push or pull to make it work.</p>

## Vocabulary

<b>Energy</b>	Energy is in everything, it can be described as 'the ability to do work'.
<b>Electromagnetic</b>	The force that occurs between electrically charged particles, like light and electric and magnetic fields.
<b>Electric charge</b>	The physical property of matter that causes a positive or negative force when placed in a magnetic field.
<b>Invisible force</b>	A force that can affect objects without touching them, eg. magnetism and static electricity.
<b>Vibration</b>	To move continuously and rapidly to and fro.