

## SEAI Junior Cycle Resources

This document sets out the **Science** learning outcomes for each of the activities in the section **What is Energy**.

<b>Energy Sources</b>	<b>E&amp;S6</b> Students should be able to research different energy sources; formulate and communicate an informed view of ways that current and future energy needs on Earth can be met.
<b>Changing Energy</b>	<p><b>Activity 1,5,6, 7&amp;8: PW6</b> Students should be able to explain energy conservation and analyse process in terms of energy changes and dissipation</p> <p><b>Activity 2,3 &amp;4: E&amp;S6</b> Students should be able to research different energy sources; formulate and communicate an informed view of ways that current and future energy needs on Earth can be met.</p> <p><b>Activity 3: PW7</b> Students should be able to design, build, and test a device that transforms energy from one form to another in order to perform a function; describe the energy changes and ways of improving efficiency</p>
<b>Exploring Energy Generation</b>	<p><b>PW8</b> Students should be able to research and discuss the ethical and sustainability issues that arise from our generation and consumption of electricity</p> <p><b>E&amp;S6</b> Students should be able to research different energy sources; formulate and communicate an informed view of ways that current and future energy needs on Earth can be met</p>
<b>Energy and Food</b>	<p><b>PW2:</b> Students should be able to identify and measure/calculate length, mass, time, temperature, area, volume, density, speed, acceleration, force, potential difference, current, resistance, electrical power</p> <p><b>PW3</b> Students should be able to investigate patterns and relationships between physical observables</p> <p><b>NoS3</b> Students should be able to design, plan and conduct investigations; explain how reliability, accuracy, precision, fairness, safety, ethics, and selection of suitable equipment have been considered</p> <p><b>NoS4</b> Students should be able to produce and select data (qualitatively/quantitatively), critically analyse data to identify patterns and relationships, identify anomalous observations, draw and justify conclusions</p>

**NoS = Nature of Science, E&S = Earth & Space, CW = Chemical World, PW = Physical World, BW = Biological World**