

KELMSCOTT HOMESCHOOL GROUP – JUNIOR SCIENCE

Term 3, 2018 @ Roleystone Hall

7 weeks: Monday 6 Aug, 13 Aug, 20 Aug, 27 Aug, 3 Sept 10 Sept, 17 Sept

Junior Science

Caters to: ages 5-10

Children aged 5 and 6 must have parental assistance during EACH lesson

Cost: \$90/student (HEWA), \$108/student (non-HEWA)

Week 1 Science introduction and ground rules	Week 2 Biological sciences Life cycles	Week 3 Biological sciences Ecosystems	Week 4 Earth and space sciences Natural processes of change; erosion
<p>Discussion: discussion about fairness and participation – What do students think is fair/what do I expect</p> <p>Safety requirements</p> <p>Activities: building a home for an egg to stop it breaking from a height of 1m. Materials used: egg (enough for 1 each) cardboard, foam, paper, cotton wool etc.</p>	<p>Activities: observing animals and plants in the natural habitat of the immediate area. Identifying young and adults. (make a recording sheet).</p> <p>Discuss: observations and how these plants and animals begin life (eggs, seeds, live birth etc)</p> <p>Draw a flow chart of the life cycles of animals and plants observed, showing how the organism starts life, grows and matures. (eg trees, butterflies, birds, dogs etc)</p>	<p>Activities: observe animals outside, see how animals interact. Inside, discussion on how animals depend on plants and each other for food and habitat. Categorise things in to “PRODUCERS” “CONSUMERS” “DECOMPOSERS”</p> <p>Complete Ecosystem mind map with various materials (coloured paper, leaves etc)</p>	<p>Activities: Outside observation of natural and manmade processes. Observing natural forces and their effects.</p> <p>Erosion model: using a tray full of various soil types, explore the forces of erosion such as wind and water on the different types of soil. Make worksheet to record results.</p>

<p>Week 5</p> <p>Chemical sciences Physical properties of natural and processed materials</p>	<p>Week 6</p> <p>Physical sciences Forces Gravity Magnetic forces</p>	<p>Week 7</p> <p>Making a volcano</p>	
<p>Activities: Red cabbage indicator – use red cabbage to see different solutions change colour. Resources needed: red cabbage, strainer, blender, vinegar, sugar, lemon juice, clear soft drink (lemonade), baking powder, bleach, plastic cups. Draw a coloured diagram of the results.</p> <p>Different liquids and solutions change colour due to their PH level. Identify which solutions are acidic and which are alkaline</p>	<p>Activities: gravity experiment how long does it take something to drop what force resist gravity in some objects (air pressure). Repeat experiment with different materials and from different heights. Note the differences and reasons for variation.</p> <p>Magnets: how do magnets work (observations) making a magnet. What happens when you make a magnet?</p> <p>Materials used: feather, paper, block of wood, rock, nails, magnets.</p>	<p>Activities: using Bicarbonate and vinegar to make a volcano. Materials: empty bottle, vinegar, red/orange food colouring, bicarbonate soda, newspaper, cardboard, paper, glue, tape.</p> <p>Class makes the 'volcano' together, with the empty bottle in the middle containing bicarbonate soda and food colouring. At the end of the session the volcano is taken outside, vinegar is added and the explosion observed. The mess is cleaned up together.</p>	