

**Program : Carbon Cycle Investigations**

**General Descriptor of Program:**

**(Years 3-6)**

Carbon is the building block of life. Join in a carbon cycle game as the atmosphere, a herbivore or a plant and act out the carbon cycle. Molecules are built and split as they are cycled around. Find out what happens to the natural system when extra carbon dioxide is introduced. Calculate how much carbon dioxide is stored in a tree by completing a tree passport. Explore the importance of soil as a carbon store, mimic the action of weathering and erosion to create your very own soil.

**Cross – Curriculum Priorities: Sustainability**

Sustainable patterns of living meet the needs of the present without compromising the ability of future generations to meet their needs. Education for sustainability develops the knowledge, skills, values and world views necessary for people to act in ways that contribute to more sustainable patterns of living.

**OI.1** The biosphere is a dynamic system providing conditions that sustain life on Earth.

**OI.2** All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.

**OI.7** Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments.

**OI.9** Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.

**General Capabilities**

- Literacy
- Numeracy**
- Information and communication technology (ICT) competence**
- Critical and creative thinking
- Ethical behaviour**
- Personal and social competence
- Intercultural understanding

**Cross-Curriculum Priorities**

- Aboriginal and Torres Strait Islander histories and cultures
- Asia and Australia’s engagement with Asia
- Sustainability**

Years targeted	Australian Curriculum links - Science		
	Science Understanding	Science as a Human Endeavour	Science Enquiry Skills
Year 3	<p>Living things can grouped on the basis of observable features and can be distinguished from non-living things (ACSSU044)</p>	<p>Science involves making predictions and describing patterns and relationships (ACSHE050)</p>	<p>Safely use appropriate materials, tools or equipment to make and record observations, using formal measurements and digital technologies as appropriate (ACSIS055)</p> <p>Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports (ACSIS060)</p>
Year 4	<p>Living things have life cycles (ACSSU072)</p> <p>Living things, including plants and animals, depend on each other and the environment to survive (ACSSU073)</p> <p>Natural and processed materials have a range of physical properties; These properties can influence their use (ACSSU074)</p>	<p>Science involves making predictions and describing patterns and relationships (ACSHE061)</p> <p>Science knowledge helps people to understand the effect of their actions (ACSHE062)</p>	<p>Safely use appropriate materials, tools or equipment to make and record observations, using formal measurements and digital technologies as appropriate (ACSIS066)</p> <p>Represent and communicate ideas and findings in a variety of ways such as diagrams, physical representations and simple reports (ACSIS071)</p>

Year 5	Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)	Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena (ACSHE0910)	Communicate ideas, explanations and processes in a variety of ways, including multi-modal texts (ACSIS093)
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