|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Achievement Standards - Science** | | | | | | **NOTES** |
| By the end of Year 4, students apply the observable properties of materials to explain how objects and materials can be used. They describe how contact and non-contact forces affect interactions between objects. They discuss how natural processes and human activity cause changes to Earth’s surface. They describe relationships that assist the survival of living things and sequence key stages in the life cycle of a plant or animal. They identify when science is used to understand the effect of their actions.  Students follow instructions to identify investigable questions about familiar contexts and make predictions based on prior knowledge. They describe ways to conduct investigations and safely use equipment to make and record observations with accuracy. They use provided tables and column graphs to organise data and identify patterns. Students suggest explanations for observations and compare their findings with their predictions. They suggest reasons why a test was fair or not. They use formal and informal ways to communicate their observations and findings. | | | | | |  |
| **Content Descriptions - Science** | | | | | |
| **Science Understanding** | Biological Sciences | **Living things have life cycles**[**ACSSU072**](http://www.scootle.edu.au/ec/search?accContentId=ACSSU072)   * ***investigating how Aboriginal and Torres Strait Islander Peoples understand and utilise the life cycles of certain species.*** * ***making and recording observations of living things as they develop through their life cycles.*** * ***describing the stages of life cycles of different living things such as insects, birds, frogs and flowering plants.*** * ***recognising that environmental factors can affect life cycles such as fire and seed germination***   **Living things depend on each other and the environment to survive**[**ACSSU073**](http://www.scootle.edu.au/ec/search?accContentId=ACSSU073)   * ***recognising how Aboriginal and Torres Strait Islander Peoples perceive themselves as being an integral part of the environment.*** * ***observing and describing predator-prey relationships.*** * ***predicting the effects when living things in feeding relationships are removed or die out in an area.*** | | | |
| **Science as a Human Endeavour** | Use and influence of science | **Science knowledge helps people to understand the effect of their actions**[**ACSHE062**](http://www.scootle.edu.au/ec/search?accContentId=ACSHE062)   * ***exploring how science has contributed to a discussion about an issue such as loss of habitat for living things or how human activity has changed the local environment.*** | | | |
| **Science Inquiry** | Communicating | **Represent and communicate observations, ideas and findings using formal and informal representations**[**ACSIS071**](http://www.scootle.edu.au/ec/search?accContentId=ACSIS071)   * ***using simple explanations and arguments, reports or graphical representations to communicate ideas to other students.*** | | | |
| **General Capabilities** | | |  | **Cross-Curriculum Priorities** | |
| **Critical and Creative Thinking** | Inquiring:   * identify and clarify information and ideas. * organise and process information.   Generating:   * imagine possibilities and connect ideas. * consider alternatives. * seek solutions and put ideas into action.   Reflecting:   * transfer knowledge into new contexts.   Analysing:   * apply logic and reasoning. * draw conclusions and design a course of action. | | **Aboriginal and Torres Strait Islander Histories and Cultures** | **Country/Place**   * Aboriginal and Torres Strait Islander communities maintain a special connection to and responsibility for Country/Place.   **Culture**   * Aboriginal and Torres Strait Islander Peoples’ ways of life are uniquely expressed through ways of being, knowing, thinking and doing. |
| **Sustainability** | **Systems**   * All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.   **Future**   * Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments. |
| **Intercultural Understanding** | Recognising:   * explore and compare cultural knowledge, beliefs and practices. | |