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| **Achievement Standards - Science** | **NOTES** |
| By the end of Year 5, students classify substances according to their observable properties and behaviours. They explain everyday phenomena associated with the transfer of light. They describe the key features of our solar system. They analyse how the form of living things enables them to function in their environments. Students discuss how scientific developments have affected people’s lives, help us solve problems and how science knowledge develops from many people’s contributions.Students follow instructions to pose questions for investigation and predict the effect of changing variables when planning an investigation. They use equipment in ways that are safe and improve the accuracy of their observations. Students construct tables and graphs to organise data and identify patterns in the data. They compare patterns in their data with predictions when suggesting explanations. They describe ways to improve the fairness of their investigations, and communicate their ideas and findings using multimodal texts. | Common School Assessments:* Creating a creature that has structural and behavioural adaptations which are suited to given environmental conditions.
* Designing a habitat that suits a creature.

Extending:* Suggesting improvements to conserve an environment for the species that live there based on their adaptations
* Students identify the link between environmental factors and adaptation.
* Identifying negative and positive impacts of environmental change or human impacts on species justifying their answers by linking to the adaptations of organisms.
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| **Content Descriptions - Science** |
| **Science Understanding** | Biological Sciences | **Living things have structural features and adaptations that help them to survive in their environment**[**ACSSU043**](http://www.scootle.edu.au/ec/search?accContentId=ACSSU043)* ***investigating Aboriginal and Torres Strait Islander Peoples’ knowledge of the adaptations of certain species and how those adaptations can be exploited.***
* ***explaining how particular adaptations help survival such as nocturnal behaviour, silvery coloured leaves of dune plants.***
* ***describing and listing adaptations of living things suited for particular Australian environments.***
* ***exploring general adaptations for particular environments such as adaptations that aid water conservation in deserts.***
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| **Science as a Human Endeavour** | Use and influence of science | **Scientific knowledge is used to solve problems and inform personal and community decisions**[**ACSHE083**](http://www.scootle.edu.au/ec/search?accContentId=ACSHE083)* ***investigating how Aboriginal and Torres Strait Islander Peoples’ traditional ecological and zoological knowledge informs sustainable harvesting practices of certain species, such as dugongs and turtles.***
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| **Science Inquiry** | Communicating | **Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts**[**ACSIS093**](http://www.scootle.edu.au/ec/search?accContentId=ACSIS093)* ***constructing multi-modal texts to communicate science ideas.***
* ***using labelled diagrams, including cross-sectional representations, to communicate ideas.***
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| Processing and analysing data and information | **Construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data using digital technologies as appropriate ACSIS090** |
| **General Capabilities** |  | **Cross-Curriculum Priorities** |
| **Critical and Creative Thinking** | *Inquiring – identifying, exploring and organising information and ideas*: Pose questions:* pose questions to clarify and interpret information and probe for causes and consequences

Identify and clarify information and ideas:* identify and clarify relevant information and prioritise ideas

*Reflecting on thinking and processes:*Transfer knowledge into new contexts:* apply knowledge gained from one context to another unrelated context and identify new meaning

***Analysing, synthesising and evaluating reasoning and procedures:*****Apply logic and reasoning:*** **assess whether there is adequate reasoning and evidence to justify a claim, conclusion or outcome**
 | **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 (OI.1)

**Culture*** Aboriginal and Torres Strait Islander Peoples’ ways of life are uniquely expressed through ways of being, knowing, thinking and doing. (OI.5)
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| **Sustainability** | **Systems*** All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival. (OI.2)

**World views:*** World views that recognise the dependence of living things on healthy ecosystems, and value diversity and social justice, are essential for achieving sustainability. (OI.4)

**Future*** Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments. (OI.7)
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| **Intercultural Understanding** | *Recognising culture and developing respect:* Explore and compare cultural knowledge beliefs and practices* describe and compare the knowledge, beliefs and practices of various cultural groups in relation to a specific time, event or custom
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| **Literacy (level 4 to end of year 6)** | *Grammar Knowledge:* Use knowledge of sentence structures:* use simple, compound and complex sentence structures to record, explain, question, describe and elaborate ideas and events

*Word Knowledge:* Understand learning area vocabulary:* use vocabulary, including subject-specific vocabulary from a range of learning areas and vocabulary that expresses shades of meaning
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