Year 5 Syllabus

Year Level Description

The science inquiry skills and science as a human endeavour strands are described across a two-year band. In their planning, schools and teachers refer to the expectations outlined in the achievement standard and also to the content of the science understanding strand for the relevant year level to ensure that these two strands are addressed over the two-year period. The three strands of the curriculum are interrelated and their content is taught in an integrated way. The order and detail in which the content descriptions are organised into teaching and learning programs are decisions to be made by the teacher.

Incorporating the key ideas of science

Over Years 3 to 6, students develop their understanding of a range of systems operating at different time and geographic scales.

In Year 5, students are introduced to cause and effect relationships through an exploration of adaptations of living things and how this links to form and function. They explore observable phenomena associated with light and begin to appreciate that phenomena have sets of characteristic behaviours. They broaden their classification of matter to include gases and begin to see how matter structures the world around them. Students consider Earth as a component within a solar system and use models for investigating systems at astronomical scales. Students begin to identify stable and dynamic aspects of systems, and learn how to look for patterns and relationships between components of systems. They develop explanations for the patterns they observe.

Science	Science as a	Science Inquiry

Understanding

BIOLOGICAL SCIENCES

Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)

CHEMICAL SCIENCES

Solids, liquids and gases have different observable properties and behave in different ways (ACSSU077)

EARTH AND SPACE SCIENCES

The Earth is part of a system of planets orbiting around a star (the sun) (ACSSU078)

PHYSICAL SCIENCES

Light from a source forms shadows and can be absorbed, reflected and

Human Endeavour

NATURE AND DEVELOPMENT OF SCIENCE

Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions (ACSHE081)

Numeracy

USE AND INFLUENCE OF SCIENCE

Scientific knowledge is used to solve problems and inform personal and community decisions (ACSHE083)

Personal and social capability

Ethical understanding

Skills

QUESTIONING AND PREDICTING

With guidance, pose clarifying questions and make predictions about scientific investigations (ACSIS231)

Literacy

Critical and creative thinking

PLANNING AND CONDUCTING

Identify, plan and apply the elements of scientific investigations to answer questions and solve problems using equipment and materials safely and identifying potential risks (ACSIS086)

Literacy

Critical and creative thinking

refracted (ACSSU080)

Decide variables to be changed and measured in fair tests, and observe measure and record data with accuracy using digital technologies as appropriate (ACSIS087)

Literacy

Numeracy

Information and Communication Technology (ICT) capability

Critical and creative thinking

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)

Literacy

Numeracy

Information and Communication Technology (ICT) capability

Critical and creative thinking

Compare data with predictions and use as evidence in developing explanations (ACSIS218)

Literacy

Numeracy

Critical and creative thinking

EVALUATING

Reflect on and suggest improvements to scientific

investigations (ACSIS091)

Critical and creative thinking

COMMUNICATING

Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts (ACSIS093)

Literacy

Information and Communication Technology (ICT) capability

Year 5 Achievement Standard

Science Understanding

At Standard, students classify solids, liquids and gases according to their observable properties and behaviours. They describe everyday phenomena associated with the transfer of light. Students describe the key features of our solar system. They analyse how the features of living things enables

them to function in their environments.

Science as a Human Endeavour

Students discuss how scientific developments have affected people's lives, help us solve problems and how science knowledge develops from many people's contributions.

Science Inquiry Skills

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. Students describe ways to improve the fairness of their investigations, and communicate their ideas and findings.

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