Science and technology K-6 sample scope and sequence

## Learning overview

### Stage 2 – odd year

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|  | Outcomes | Learning overview |
| Term 1 | Working scientifically: ST2-1WS-S  Design and production: ST2-2DP-T  Living world: ST2-5LW-T  Digital technologies: ST2-11DI-T | Focus – living world and digital technologies  Students consider the agricultural processes used to grow plants and raise animals. They design and produce a product or system to support the growth of a plant and/or animal. Students explore different types of data and interpret patterns. |
| Term 2 | Working scientifically: ST2-1WS-S  Design and production: ST2-2DP-T  Earth and space: ST2-10ES-S  Digital technologies: ST2-11DI-T | Focus – Earth and space  Students work scientifically to learn about the Earth’s surface and how it changes over time. They investigate natural processes and human activity in order to develop a view in relation to sustainable practices. They examine how digital systems are used to gather and communicate data about changes to the Earth’s surface over time. |
| Term 3 | Design and production: ST2-2DP-T  Material world: ST2-7MW-T | Focus – material world  Students investigate how different properties of materials affect their suitability for products. They have the opportunity to develop a design solution to an identified need or opportunity, using a variety of materials. |
| Term 4 | Working scientifically: ST2-1WS-S  Design and production: ST2-2DP-T, ST2-3DP-T  Physical world: ST2-9PW-ST | Focus – physical world  Students work scientifically to investigate how contact and non-contact forces affect the behaviour of objects. They explore how energy and forces are used in the manufacture of products and in systems and use this knowledge to develop a design solution. They represent their solutions using algorithms. |

### Stage 2 – even year

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|  | Outcomes | Learning overview |
| Term 1 | Working scientifically: ST2-1WS-S  Design and production: ST2-2DP-T  Living world: ST2-5LW-T  Digital technologies: ST2-11DI-T | Focus – living world and digital technologies  Students consider the agricultural processes used to grow plants and raise animals. They design and produce a product or system to support the growth of a plant and/or animal. Students explore different types of data and interpret patterns. |
| Term 2 | Working scientifically: ST2-1WS-S  Design and production: ST2-2DP-T  Earth and space: ST2-10ES-S  Digital technologies: ST2-11DI-T | Focus – Earth and space  Students work scientifically to learn about the Earth’s surface and how it changes over time. They investigate natural processes and human activity in order to develop a view in relation to sustainable practices. They examine how digital systems are used to gather and communicate data about changes to the Earth’s surface over time. |
| Term 3 | Design and production: ST2-2DP-T  Material world: ST2-7MW-T | Focus – material world  Students investigate how different properties of materials affect their suitability for products. They have the opportunity to develop a design solution to an identified need or opportunity, using a variety of materials. |
| Term 4 | Working scientifically: ST2-1WS-S  Design and production: ST2-2DP-T, ST2-3DP-T  Physical world: ST2-9PW-ST | Focus – digital technologies  Students focus on digital systems and how they transmit data. They explore different types of data, have the opportunity to learn how to interpret patterns and develop skills in visual programming. |

[Science and Technology K-6 Syllabus (2017)](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales.