<table>
<thead>
<tr>
<th>Working Scientifically</th>
<th>Design and Production</th>
<th>Living World</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Early Stage 1 outcomes</strong>&lt;br&gt;A student:</td>
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<td><strong>SC4-4WS</strong>&lt;br&gt;identifies questions and problems that can be tested or researched and makes predictions based on scientific knowledge</td>
<td><strong>SC4-5WS</strong>&lt;br&gt;collaboratively and individually produces a plan to investigate questions and problems</td>
<td><strong>SC4-6WS</strong>&lt;br&gt;follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually</td>
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<td><strong>SC4-7WS</strong>&lt;br&gt;processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions</td>
<td><strong>SC4-8WS</strong>&lt;br&gt;selects and uses appropriate strategies, understanding and skills to produce creative and plausible solutions to identified problems</td>
<td><strong>SC4-9WS</strong>&lt;br&gt;presents science ideas, findings and information to a given audience using appropriate scientific language, text types and representations</td>
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<td><strong>STe-1WS-S</strong>&lt;br&gt;observes, questions and collects data to communicate ideas</td>
<td><strong>TE4-1DP</strong>&lt;br&gt;designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities</td>
<td><strong>SC4-14LW</strong>&lt;br&gt;relates the structure and function of living things to their classification, survival and reproduction</td>
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<td><strong>SC4-15LW</strong>&lt;br&gt;explains how new biological evidence changes people’s understanding of the world</td>
<td><strong>TE4-2DP</strong>&lt;br&gt;plans and manages the production of designed solutions</td>
<td><strong>SC4-15LW</strong>&lt;br&gt;explains how new biological evidence changes people’s understanding of the world</td>
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<td><strong>STe-2DP-T</strong>&lt;br&gt;develops solutions to an identified need</td>
<td><strong>TE4-3DP</strong>&lt;br&gt;selects and safely applies a broad range of tools, materials and processes in the production of quality projects</td>
<td><strong>TE4-5AG</strong>&lt;br&gt;investigates how food and fibre are produced in managed environments</td>
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<td><strong>STe-3LW-ST</strong>&lt;br&gt;explores the characteristics, needs and uses of living things</td>
<td><strong>TE4-4DP</strong>&lt;br&gt;designs algorithms for digital solutions and implements them in a general-purpose programming language</td>
<td><strong>TE4-6FO</strong>&lt;br&gt;explains how the characteristics and properties of food determine preparation techniques for healthy eating</td>
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<td><strong>ST1-1WS-S</strong>&lt;br&gt;observes, questions and collects data to communicate and compare ideas</td>
<td><strong>ST1-2DP-T</strong>&lt;br&gt;uses materials, tools and equipment to develop solutions for a need or opportunity</td>
<td><strong>ST1-5LW-T</strong>&lt;br&gt;identifies how plants and animals are used for food and fibre products</td>
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<td><strong>ST2-1WS-S</strong>&lt;br&gt;questions, plans and conducts scientific investigations, collects and summarises data to communicate representations</td>
<td><strong>ST2-2DP-T</strong>&lt;br&gt;selects and uses materials, tools and equipment to develop solutions for a need or opportunity</td>
<td><strong>ST2-4LW-S</strong>&lt;br&gt;compares features and characteristics of living and non-living things</td>
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<td><strong>ST3-1WS-S</strong>&lt;br&gt;plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate conclusions</td>
<td><strong>ST3-2DP-T</strong>&lt;br&gt;plans and uses materials, tools and equipment to develop solutions for a need or opportunity</td>
<td><strong>ST3-4LW-S</strong>&lt;br&gt;examines how the environment affects the growth, survival and adaptation of living things</td>
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<td><strong>ST1-3DP-T</strong>&lt;br&gt;describes, follows and represents algorithms to solve problems</td>
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<td><strong>ST1-4LW-S</strong>&lt;br&gt;describes observable features of living things and their environments</td>
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<td><strong>ST2-3DP-T</strong>&lt;br&gt;defines problems, describes and follows algorithms to develop solutions</td>
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<td><strong>ST2-5LW-T</strong>&lt;br&gt;describes how agricultural processes are used to grow plants and raise animals for food, clothing and shelter</td>
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### Early Stage 1 outcomes
#### Material World
- **STe-4MW-ST**
  - identifies that objects are made of materials that have observable properties

- **SC4-16CW**
  - describes the observed properties and behaviour of matter, using scientific models and theories about the motion and arrangement of particles

#### Physical World
- **STe-5PW-ST**
  - observes the way objects move and relates changes in motion to push and pull forces

- **SC4-10PW**
  - describes the action of unbalanced forces in everyday situations

- **SC4-11PW**
  - discusses how scientific understanding and technological developments have contributed to finding solutions to problems involving energy transfers and transformations

### Stage 1 outcomes
#### Material World
- **ST1-6MW-S**
  - identifies that materials can be changed or combined

- **ST2-6MW-S**
  - describes how adding or removing heat causes a change of state

- **ST3-6MW-S**
  - explains the effect of heat on the properties and behaviour of materials

- **SC4-17CW**
  - explains how scientific understanding of, and discoveries about the properties of elements, compounds and mixtures relate to their uses in everyday life

#### Physical World
- **ST1-8PW-S**
  - describes common forms of energy and explores some characteristics of sound energy

- **ST2-8PW-ST**
  - describes the characteristics and effects of common forms of energy, such as light and heat

- **ST3-8PW-ST**
  - explains how energy is transformed from one form to another

- **TE4-9MA**
  - investigates how the characteristics and properties of tools, materials and processes affect their use in designed solutions

### Stage 2 outcomes
#### Material World
- **ST1-7MW-T**
  - describes how the properties of materials determine their use

- **ST2-7MW-T**
  - investigates the suitability of natural and processed materials for a range of purposes

- **ST3-7MW-T**
  - explains how the properties of materials determine their use for a range of purposes

- **TE4-8EN**
  - explains how force, motion and energy are used in engineered systems

#### Physical World
- **ST1-9PW-ST**
  - investigates how forces and energy are used in products

- **ST2-9PW-ST**
  - describes how contact and non-contact forces affect an object’s motion

- **ST3-9PW-ST**
  - investigates the effects of increasing or decreasing the strength of a specific contact or non-contact force

- **SC4-12ES**
  - describes the dynamic nature of models, theories and laws in developing scientific understanding of the Earth and solar system

- **SC4-13ES**
  - explains how advances in scientific understanding of processes that occur within and on the Earth, influence the choices people make about resource use and management

### Stage 3 outcomes
#### Material World
- **ST1-10ES-S**
  - recognises observable changes occurring in the sky and on the land and identifies Earth’s resources

- **ST2-10ES-S**
  - investigates regular changes caused by interactions between the Earth and the Sun, and changes to the Earth’s surface

- **ST3-10ES-S**
  - explains regular events in the solar system and geological events on the Earth’s surface

#### Physical World
- **ST1-11DI-T**
  - identifies the components of digital systems and explores how data is represented

- **ST2-11DI-T**
  - describes how digital systems represent and transmit data

- **ST3-11DI-T**
  - explains how digital systems represent data, connect together to form networks and transmit data

- **TE4-10TS**
  - explains how people in technology related professions contribute to society now and into the future

### Stage 4 outcomes
#### Material World
- **ST1-6MW-S**
  - identifies that materials can be changed or combined

- **ST2-6MW-S**
  - describes how adding or removing heat causes a change of state

- **ST3-6MW-S**
  - explains the effect of heat on the properties and behaviour of materials

#### Physical World
- **ST1-8PW-S**
  - describes common forms of energy and explores some characteristics of sound energy

- **ST2-8PW-ST**
  - describes the characteristics and effects of common forms of energy, such as light and heat

- **ST3-8PW-ST**
  - explains how energy is transformed from one form to another

- **TE4-8EN**
  - explains how force, motion and energy are used in engineered systems

#### Earth and Space
- **STe-6ES-S**
  - identifies how daily and seasonal changes in the environment affect humans and other living things

- **ST1-10ES-S**
  - recognises observable changes occurring in the sky and on the land and identifies Earth’s resources

- **ST2-10ES-S**
  - investigates regular changes caused by interactions between the Earth and the Sun, and changes to the Earth’s surface

- **ST3-10ES-S**
  - explains regular events in the solar system and geological events on the Earth’s surface

#### Digital Technologies
- **ST1-11Di-T**
  - identifies the components of digital systems and explores how data is represented

- **ST2-11Di-T**
  - describes how digital systems represent and transmit data

- **ST3-11Di-T**
  - explains how digital systems represent data, connect together to form networks and transmit data