**Irrawang PS** 

**Early Stage One Scope and Sequence - Science and Technology**

**1.5 hours per week or equivalent**

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|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **Skills Focus** |
| **Term 1** | **Material World**  STe-1WS-S, STe-2DP-T, STe-4MW-ST, STe-7DI-T  How do the properties of materials affect their use?  What are some of the observable properties of materials?  How can living things be used to meet our needs? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Researching and planning  Producing and implementing  Testing and evaluating |
| That’s my hat | | | | | | | | | |  |
| **Term 2** | **Earth and Space**  STe-6ES-S, STe-7DI-T  How do daily and seasonal changes affect the environment?  \*\* How are digital technologies used in everyday life? | | | | | | | | | | Questioning and predicting  Processing and analysing data  Identifying and defining |
| Weather in My World | | | | | | | | | |  |
| **Term 3** | **Physical World**  STe-5PW-ST, STe-7DI-T  What causes objects to move in different ways?  \*\* How does following steps help to achieve a goal? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Identifying and defining  Producing and implementing |
| On the Move | | | | | | | | | |  |
| **Term 4** | **Living World**  STe-3LW-ST, STe-7DI-T  What do we notice about living things? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Researching and planning  Producing and implementing |
| Growing Well/Staying Alive | | | | | | | | | |  |

**\*\* Digital Technologies integrated**

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| **ODD** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **Skills Focus** |
| **Term 1** | **Living World**  ST1-4LW-S, ST1-1WS-S,  What are the *external* features of living things?  How do living things change as they grow? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Researching and planning  Producing and implementing |
| External Feature of living things & Living Things change (Watch it grow & *External Features*) | | | | | | | | | |  |
| **Term 2** | **Material World**  ST1-6MW-S, ST1-1WS-S  What changes occur when materials are combined? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Producing and implementing  Testing and evaluating |
| Materials can be combined and changed (All Mixed up) | | | | | | | | | |  |
| **Term 3** | Physical World  ST1-9PW-ST,ST1-1WS-S,  ST1-2DP-T  How are forces used for a purpose? | | | | | | | | | | Processing and analysing data  Communicating  Researching and planning  Producing and implementing |
| Forces and Energy in products (Machine Makers & Push Pull) | | | | | | | | | |  |
| **Term 4** | **Earth and Space**  ST1-10ES-S, ST1-WS-S  How can we investigate the observable changes that occur in the sky and on the land?  What are Earth’s resources and how do we use and care for the? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Identifying and defining |
| Changes in sky and on land (Up, down and all around & Changes all around) Earth’s Resources (water works! & *soil)* | | | | | | | | | |  |



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| **EVEN** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **Skills Focus** |
| **Term 1** | **Digital Technologies**  ST1-11DI-T, ST1-2DP-T, ST1-3DP-T  What components might make up a digital system?  What is data and how can we store and represent it?  How can we record instructions for others to follow and understand? | | | | | | | | | | Processing and analysing data  Communicating  Identifying and defining  Producing and implementing  Testing and evaluating |
|  | | | | | | | | | |  |
| **Term 2** | **Living World**  ST1-5LW-T, ST1-1WS-S, ST1-2DP-T  How can we improve a local environment to encourage living things to thrive? How do humans use plants and animals? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Researching and planning  Producing and implementing |
| Living things live in different places & Plants and animals used for food and fibre (Schoolyard Safari & *food and fibre)* | | | | | | | | | |  |
| **Term 3** | **Physical World**  ST1-1WS-S, ST1-8PW-ST  What are the different forms of energy around us and how can we detect them? | | | | | | | | | | Processing and analysing data  Communicating  Researching and planning  Producing and implementing |
| Energy comes in different forms that can be detected (Look! Listen! & *Heat and electricity*) | | | | | | | | | |  |
| **Term 4** | **Material World**  ST1-7MW-T, ST1-2DP-T  How do the properties of materials determine their use? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Producing and implementing  Testing and evaluating |
| Materials are used for a specific purpose (Bend it, Stretch it!) | | | | | | | | | |  |

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**Stage Two Scope and Sequence - Science and Technology**

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| **ODD** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **Skills Focus** |
| **Term 1** | [**Material World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2780)  ST2-6MW-S, ST2-1WS-S  How do materials change when heated and cooled? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Researching and Planning  Producing and implementing |
| Melting Moments | | | | | | | | | |  |
| **Term 2** | [**Living World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2777)  ST2-1WS-S, ST2-4LW-S  What are the similarities and differences between the life cycles of living things?  How are environments and living things interdependent? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Communicating  Identifying and defining  Researching and planning |
| Among the Gumtrees OR Friends and Foes | | | | | | | | | |  |
| **Term 3** | [**Earth and Space**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2786)  ST2-10ES-S, ST2-1WS-S  How do natural processes and human actions change the Earth’s surface over time?  What occurs as a result of the interactions between the Earth and the Sun? | | | | | | | | | | Processing and analysing data  Communicating  Researching and Planning |
| Beneath Our Feet or Night and Day | | | | | | | | | |  |
| **Term 4** | [**Physical World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2783)  ST2-9PW-ST, ST2-1WS-S, ST2-2DP-T  How can objects affect other objects with or without touching them?  How can we use forces and energy in a product or system? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Identifying and defining  Testing and evaluating |
| Smooth Moves or Magnetic Moves | | | | | | | | | |  |

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| **EVEN** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **Skills Focus** |
| **Term 1** | [**Digital Technologies**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2789)  ST2-11DI-T, ST2-2DP-T, ST2-3DP-T  How do digital systems share information and instructions?  Why do we represent data in different ways?  How are algorithms used to develop digital systems? | | | | | | | | | | Processing and analysing data  Identifying and defining  Producing and implementing  Testing and evaluating |
|  | | | | | | | | | |  |
| **Term 2** | [**Living World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2777)  ST2-1WS-S, ST2-4LW-S  How do we create food and fibre products from animals and plants?  How can we group living things? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Communicating  Identifying and defining  Researching and planning |
| Feathers, Fur or Leaves? | | | | | | | | | |  |
| **Term 3** | [**Material World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2780)  ST2-7MW-T, ST2-1WS-S, ST2-2DP-T  How do you decide upon which material to use for a particular purpose? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Researching and Planning  Producing and implementing |
| Package it Better or Material World | | | | | | | | | |  |
| **Term 4** | [**Physical World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2789)  ST2-8PW-ST, ST2-1WS-S  How do light, heat and electrical energy make things happen? | | | | | | | | | | Planning and conducting investigations  Processing and analysing data  Identifying and defining  Testing and evaluating |
| Heating Up | | | | | | | | | |  |

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| **ODD** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **Skills Focus** |
| **Term 1** | **Living World**  ST3-4LW-S, ST3-1WS-S    How do physical conditions affect the survival of living things?  How do the structural and behavioural features of living things support survival? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Processing and analysing data  Identifying and defining  Researching and Planning |
| Desert Survivors | | | | | | | | | |  |
| **Term 2** | [**Physical World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2801)  ST3-8PW-ST, ST3-1WS-S  What types of energy transformations can be observed? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Processing and analysing data  Communicating  Producing and implementing  Testing and evaluating |
| Light Shows | | | | | | | | | |  |
| **Term 3** | [**Material World**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2798)  ST3-6MW-S, ST3-1WS-S  How can the state of materials be changed and manipulated?  What is the result of combining materials? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Processing and analysing data  Research and planning  Producing and implementing |
| Change Detectives | | | | | | | | | |  |
| **Term 4** | [**Earth and Space**](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-and-technology-k-6-new-syllabus/content/2804)  ST3-10ES-S, ST3-1WS-S  How do sudden geological changes and extreme weather events affect the Earth’s surface?  How does the Earth compare to other planets in the solar system? | | | | | | | | | | Processing and analysing data  Communicating  Researching and planning |
| Earthquake Explorers or Creators and Destroyers or Earth’s Place in Space | | | | | | | | | |  |

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| **EVEN** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **Skills Focus** |
| **Term 1** | **Digital Technologies**  ST3-11DI-T, ST3-2DP-T, ST3-3DP-T  How do components of digital marketing systems interact with each other to transmit data?  How do the components of digital systems connect together to form networks?  How do we represent decision-making in an algorithm? | | | | | | | | | | Processing and analysing data  Identifying and defining  Researching and planning  Producing and implementing  Testing and evaluating |
| Game Time! | | | | | | | | | |  |
| **Term 2** | **Physical World**  ST3-8PW-ST, ST3-1WS-S, ST3-2DP-T  How can we make a force stronger or weaker?  How can electricity be used in a product or system? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Processing and analysing data  Communicating  Producing and implementing  Testing and evaluating |
| Circuits and Switches or Essential Energy | | | | | | | | | |  |
| **Term 3** | **Living World**  ST3-4LW-S, ST3-1WS-S, ST3-5LW-T  Why is it important for food and/or fibre to be produced sustainably? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Processing and analysing data  Identifying and defining  Researching and Planning |
| Marvellous Micro-organisms or Rising Salt | | | | | | | | | |  |
| **Term 4** | **Material World**  ST3-1WS-S, ST3-7MW-T  Why are the characteristics of materials important when designing and producing? | | | | | | | | | | Questioning and predicting  Planning and conducting investigations  Processing and analysing data  Research and planning  Producing and implementing |
| What’s the Matter? | | | | | | | | | |  |