Science and technology K-6 sample scope and sequence

## Outcomes only – whole school

### Term 1 – odd year

#### What are the properties of different materials? How can materials be changed?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Materials and placesWorking scientifically: STe-1WS-SDesign and production: STe-2DP-T Material world: STe-4MW-STDigital technologies: STe-7DI-T | Changes in materialsWorking scientifically: ST1-1WS-SDesign and production: ST1-2DP-TMaterial world: ST1-6MW-SDigital technologies: ST1-11DI-T | Changes of state and heat energyWorking scientifically: ST2-1WS-SDesign and production: ST2-2DP-TMaterial world: ST2-6MW-SPhysical world: ST2-8PW-ST | Materials and changes of stateWorking scientifically: ST3-1WS-SMaterial world: ST3-6MW-S |
| Geography: GEe-1, GEe-2, English: ENe-1A |  | Mathematics: MA2-9MG, MA2-13MG |  |

### Term 2 – odd year

#### How are plants and animals managed and used to improve people’s daily lives?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Living things – needs and usesWorking scientifically: STe-1WS-SDesign and production: STe-2DP-T Living world: STe-3LW-STDigital technologies: STe-7DI-T | Environments, food and fibre – usesWorking scientifically: ST1-1WS-SDesign and production: ST1-2DP-T, ST1-3DP-TLiving world: ST1-4LW-S, ST1-5LW-T | Environments and interdependence,Food and fibre – productionWorking scientifically: ST2-1WS-SDesign and production: ST2-2DP-T, ST2-3DP-TLiving world: ST2-4LW-S, ST2-5LW-TDigital technologies: ST2-11DI-T | Food and fibre - sustainable managementDesign and production: ST3-2DP-T Living world: ST3-5LW-T |
| English: ENe-1APDHPE: PDe-6 | Geography: GE1-1, GE1-2, GE1-3PDHPE: PD1-6 | Geography: GE2-1, GE2-2, GE2-3PDHPE: PD2-6 | Geography: GE3-2, GE3-3 |

### Term 3 – odd year

#### What are the different types and effects of energy? How can energy change?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Energy – forcesWorking scientifically: STe-1WS-SDesign and production: STe-2DP-TPhysical world: STe-5PW-STDigital technologies: STe-7DI-T | Energy types – sound, light and heatWorking scientifically: ST1-1WS-SDesign and production: ST1-2DP-T, ST1-3DP-TPhysical world: ST1-8PW-SDigital technologies: ST1-11DI-T | Energy – light and electricityWorking scientifically: ST2-1WS-SPhysical world: ST2-8PW-STDigital technologies: ST2-11DI-T | Energy - electricityWorking scientifically: ST3-1WS-SDesign and production: ST3-2DP-TPhysical world: ST3-8PW-STDigital technologies: ST3-11DI-T |

### Term 4 – odd year

#### What changes happen in the sky, on land and in space? How do these changes affect people?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Weather and seasonsWorking scientifically: STe-1WS-SDesign and production: STe-2DP-TEarth and space: STe-6ES-SDigital technologies: STe-7DI-T | Earth’s resources – water & recyclingWorking scientifically: ST1-1WS-SDesign and production: ST1-2DP-T Earth and space: ST1-10ES-S | Space – Earth and sunWorking scientifically: ST2-1WS-S Earth and space: ST2-10ES-SDigital technologies: ST2-11DI-T | Earth’s place in space – solar systemWorking scientifically: ST3-1WS-SDesign and production: ST3-2DP-T, ST3-3DP-TEarth and space: ST3-10ES-SDigital technologies: ST3-11DI-T |
| Geography: GEe-1, GEe-2English: ENe-1A | Geography: GE1-1, GE1-3 |  |  |

### Term 1 – even year

#### How do the properties of different materials influence their use for particular purposes?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Materials and placesWorking scientifically: STe-1WS-SDesign and production: STe-2DP-TMaterial world: STe-4MW-STDigital technologies: STe-7DI-T | Properties and purposes of materialsWorking scientifically: ST1-1WS-SDesign and production: ST1-2DP-T Material world: ST1-7MW-T | Properties and purposes of materialsWorking scientifically: ST2-1WS-SDesign and production: ST2-2DP-TMaterial world: ST2-7MW-T | Properties of matter and use in productsWorking scientifically: ST3-1WS-SDesign and production: ST3-2DP-TMaterial world: ST3-7MW-T |
| Geography: GEe-1, GEe-2, English: ENe-1A |  |  |  |

### Term 2 – even year

#### How do the features of living things influence their needs, growth and survival?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Living things – needs and usesWorking scientifically: STe-1WS-SDesign and production: STe-2DP-TLiving world: STe-3LW-STDigital technologies: STe-7DI-T | Classification, growth and changeWorking scientifically: ST1-1WS-SDesign and production: ST1-2DP-TLiving world: ST1-4LW-SDigital technologies: ST1-11DI-T | Classification and life cyclesWorking scientifically: ST2-1WS-SDesign and production: ST2-2DP-TLiving world: ST2-4LW-SDigital technologies: ST2-11DI-T | Growth, survival and adaptationsWorking scientifically: ST3-1WS-SDesign and production: ST3-2DP-TLiving world: ST3-4LW-SDigital technologies: ST3-11DI-T |
| English: ENe-1APDHPE: PDe-6 | Mathematics: MA1-9MG |  | Geography: GE3-1, GE3-2, GE3-3 |

### Term 3 – even year

#### What are the different types of forces? How can forces be changed and used for particular purposes?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Energy – forcesWorking scientifically: STe-1WS-SDesign and production: STe-2DP-TPhysical world: STe-5PW-STDigital technologies: STe-7DI-T | Forces and energy use in productsWorking scientifically: ST1-1WS-S Design and production: ST1-2DP-TPhysical world: ST1-9PW-ST | Forces – contact and non-contact, products and systemsWorking scientifically: ST2-1WS-SDesign and production: ST2-2DP-TPhysical world: ST2-9PW-ST | Effects of changing strength of forcesWorking scientifically: ST3-1WS-SDesign and production: ST3-2DP-TPhysical world: ST3-9PW-STDigital technologies: ST3-11DI-T |
|  |  |  | Mathematics: MA3-9MG, MA3-13MG |

### Term 4 – even year

#### What changes happen in the sky and on land? How do these changes affect people?

|  |  |  |  |
| --- | --- | --- | --- |
| Early Stage 1 | Stage 1 | Stage 2 | Stage 3 |
| Weather and seasonsWorking scientifically: STe-1WS-SDesign and production: STe-2DP-T Earth and space: STe-6ES-SDigital technologies: STe-7DI-T | Changes in sky and on land, weather and seasonsWorking scientifically: ST1-1WS-SDesign and production: ST1-2DP-T, ST1-3DP-TEarth and space: ST1-10ES-SDigital technologies: ST1-11DI-T | Changes to Earth’s surface - natural and human impactWorking scientifically: ST2-1WS-SEarth and space: ST2-10ES-SDigital technologies: ST2-11DI-T | Changes to Earth’s surface - natural disasters and mitigationWorking scientifically: ST3-1WS-SDesign and production: ST3-2DP-TEarth and space: ST3-10ES-SDigital technologies: ST3-11DI-T |
| Geography: GEe-1, GEe-2English: ENe-1A | Geography: GE1-1, GE1-3 |  | Geography: GE3-2, GE3-3, GE3-4Mathematics: MA3-17MG |

[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), [English K-10 Syllabus (2012)](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/english-year-10/english-k-10), [PDHPE K-10 Syllabus (2018)](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/pdhpe/pdhpe-k-10-2018), [Mathematics K-10 Syllabus (2012)](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/mathematics/mathematics-k-10) and [Geography K-10 Syllabus (2015)](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/hsie/geography-k-10) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales.