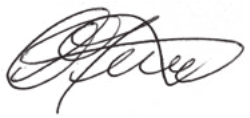
Stile

Scope and Sequence

Version 9 of the Australian Curriculum

A note from our Head of Education



Clare Feeney | Head of Education
and the whole Stile team

Stile is for everyday use in your classroom. It facilitates vibrant, collaborative learning with a mixture of rich, interactive activities that collectively cover every outcome of the Years 7–10 Science curriculum.

To support you, we've created this scope and sequence document to give you guidance on how you can use Stile as a program of learning across Years 7–10. This sequence is designed to be used as a guide – a way to ensure you are covering the curriculum with our resources – but as with everything at Stile you can customise it to best suit your classes. Make as few or as many changes as you like; it's all about teaching in your style and doing what works for your students. Our curriculum-aligned lessons are ready to teach straight out of the box and have built-in customisation and editing tools that let you tailor them to your classroom. We have created these resources to do some of the work for you so you can do what you do best: teach.

If you have any questions or would like to chat more about our science program please reach out. We're a bunch of teachers and science nerds based in Melbourne, with team members across the country, and we love chatting with fellow educators about awesome science education.

Relationships in ecosystems

Clownfish and anemones have a mutualistic relationship, where both species benefit from one another.

Contents

All units in Stile address the general capabilities of the Australian Curriculum. We have used the following symbols to indicate this:

- Ethical understanding
- Literacy
- Critical and creative thinking
- Numeracy
- Personal and social capability
- Digital literacy
- Intercultural understanding

Year 7 – Scope & Sequence

Stile X booklets are available for all units in this scope and sequence. With Stile X, you can offer support and extension for students in class or give them the tools to review and master knowledge independently.

Introduction to Science

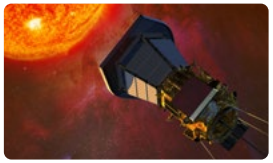
What is science and how can it help us solve global problems?

States of Matter

Why is liquid water so important for humans to live on Mars?

Mixtures

Can we 3D-print new bones to replace broken ones?



Our Place in Space

Can we travel to the Sun?

Term 1

Week 1 2 3 4 5 6 7 8 9

Unit 1 | Unit 2

Term 2

10 11 12 13 14 15 16 17 18

Unit 3 | Unit 4

Term 3

Week 1 2 3 4 5 6 7 8 9

Unit 5

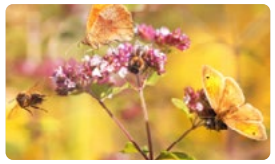
Term 4

10 11 12 13 14 15 16 17 18

Unit 6 | Unit 7

Forces

How can you scale a wall like a gecko?



Classification and Biodiversity

Do we need to save the bees?

Food Chains and Food Webs

Why do cats have slit-shaped pupils?

Year 7 – Curriculum alignment

	Unit 1 Introduction to Science	Unit 2 States of Matter	Unit 3 Mixtures
Science understanding	This unit focuses on Science as a human endeavour and Science inquiry strands.	**AC9S7U05** use particle theory to describe the arrangement of particles in a substance, including the motion of and attraction between particles, and relate this to the properties of the substance	**AC9S7U06** use a particle model to describe differences between pure substances and mixtures and apply understanding of properties of substances to separate mixtures
Science as a human endeavour	**AC9S7H01** explain how new evidence or different perspectives can lead to changes in scientific knowledge **AC9S7H02** investigate how cultural perspectives and world views influence the development of scientific knowledge **AC9S7H03** examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations	**AC9S7H01** explain how new evidence or different perspectives can lead to changes in scientific knowledge **AC9S7H03** examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations	**AC9S7H01** explain how new evidence or different perspectives can lead to changes in scientific knowledge **AC9S7H03** examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations
Science inquiry	**AC9S7I01** develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships **AC9S7I02** plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place **AC9S7I03** select and use equipment to generate and record data with precision, using digital tools as appropriate **AC9S7I04** select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information **AC9S7I05** analyse data and information to describe patterns, trends and relationships and identify anomalies **AC9S7I06** analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions **AC9S7I07** construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information **AC9S7I08** write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate	**AC9S7I01** develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships **AC9S7I02** plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place **AC9S7I05** analyse data and information to describe patterns, trends and relationships and identify anomalies **AC9S7I07** construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information **AC9S7I08** write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate	**AC9S7I02** plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place **AC9S7I03** select and use equipment to generate and record data with precision, using digital tools as appropriate **AC9S7I04** select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information **AC9S7I05** analyse data and information to describe patterns, trends and relationships and identify anomalies **AC9S7I06** analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions **AC9S7I08** write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Year 7 – Curriculum alignment

Unit 4 Our Place in Space

Science understanding

AC9S7U03

model cyclic changes in the relative positions of the Earth, sun and moon and explain how these cycles cause eclipses and influence predictable phenomena on Earth, including seasons and tides

Science as a human endeavour

AC9S7H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S7H02

investigate how cultural perspectives and world views influence the development of scientific knowledge

Science inquiry

AC9S7I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S7I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S7I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S7I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S7I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S7I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S7I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S7I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Unit 5 Forces

Science understanding

AC9S7U04

investigate and represent balanced and unbalanced forces, including gravitational force, acting on objects, and relate changes in an object's motion to its mass and the magnitude and direction of forces acting on it

Science as a human endeavour

AC9S7H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S7H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

Science inquiry

AC9S7I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S7I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S7I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S7I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S7I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S7I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S7I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S7I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Unit 6 Classification and Biodiversity

Science understanding

AC9S7U01

investigate the role of classification in ordering and organising the diversity of life on Earth and use and develop classification tools including dichotomous keys

Science as a human endeavour

AC9S7H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S7H02

investigate how cultural perspectives and world views influence the development of scientific knowledge

AC9S7H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

AC9S7H04

explore the role of science communication in informing individual viewpoints and community policies and regulations

Science inquiry

AC9S7I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S7I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S7I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S7I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S8I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Year 7 – Curriculum alignment

Unit 7 Food Chains and Food Webs

Science understanding

AC9S7U02

use models, including food webs, to represent matter and energy flow in ecosystems and predict the impact of changing abiotic and biotic factors on populations

Science as a human endeavour

AC9S7H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S7H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

Science inquiry

AC9S7I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S7I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S7I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S7I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S7I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S7I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S7I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S7I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Year 8 – Scope & Sequence

Stile X booklets are available for all units in this scope and sequence. With Stile X, you can offer support and extension for students in class or give them the tools to review and master knowledge independently.

Cells

Are you ready to meet lab-grown meat?

Body Systems

What does it take to be a cold-blooded killer?

Energy

What can we learn from nature's energy engineers?

Heat

How can I cook the perfect pizza?

Term 1

Week 1 2 3 4 5 6 7 8 9

Unit 1 | Unit 2

Term 2

10 11 12 13 14 15 16 17 18

Unit 3 | Unit 4

Term 3

Week 1 2 3 4 5 6 7 8 9

Unit 5 | Unit 6 | Unit 7

Term 4

10 11 12 13 14 15 16 17 18

Unit 8

Magnetism

What is wireless electricity?

Physical and Chemical Change

What does chemistry have to do with chocolate making?

Elements and Compounds

Why is helium so rare?

Active Earth

How do we build future-ready cities?

Year 8 – Curriculum alignment

Unit 1 Cells

Science understanding

AC9S8U01

recognise cells as the basic units of living things, compare plant and animal cells, and describe the functions of specialised cell structures and organelles

Science as a human endeavour

AC9S8H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S8H02

investigate how cultural perspectives and world views influence the development of scientific knowledge

AC9S8H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

Science inquiry

AC9S8I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S8I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Unit 2 Body Systems

Science understanding

AC9S8U02

analyse the relationship between structure and function of cells, tissues and organs in a plant and an animal organ system and explain how these systems enable survival of the individual

Science as a human endeavour

AC9S8H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

Science inquiry

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S8I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Unit 3 Energy

Science understanding

AC9S8U05

classify different types of energy as kinetic or potential and investigate energy transfer and transformations in simple systems

Science as a human endeavour

AC9S8H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

Science inquiry

AC9S8I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S8I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

Year 8 – Curriculum alignment

Unit 4 Heat

Science understanding

AC9S8U05

classify different types of energy as kinetic or potential and investigate energy transfer and transformations in simple systems

Science as a human endeavour

AC9S8H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S8H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

Science inquiry

AC9S8I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S8I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S8I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

Unit 5 Magnetism

Science understanding

AC9S8U05

classify different types of energy as kinetic or potential and investigate energy transfer and transformations in simple systems

Science as a human endeavour

AC9S8H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

Science inquiry

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

Unit 6 Physical and Chemical Change

Science understanding

AC9S8U07

compare physical and chemical changes and identify indicators of energy change in chemical reactions

Science as a human endeavour

AC9S8H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S8H02

investigate how cultural perspectives and world views influence the development of scientific knowledge

Science inquiry

AC9S8I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S8I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Year 8 – Curriculum alignment

Unit 7 Elements and Compounds

Science understanding

AC9S8U06

classify matter as elements, compounds or mixtures and compare different representations of these, including 2-dimensional and 3-dimensional models, symbols for elements and formulas for molecules and compounds

Science as a human endeavour

AC9S8H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S8H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

Science inquiry

AC9S8I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S8I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I06

analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S8I07

construct evidence-based arguments to support conclusions or evaluate claims and consider any ethical issues and cultural protocols associated with using or citing secondary data or information

AC9S8I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Unit 8 Active Earth

Science understanding

AC9S8U03

investigate tectonic activity including the formation of geological features at divergent, convergent and transform plate boundaries and describe the scientific evidence for the theory of plate tectonics

AC9S8U04

describe the key processes of the rock cycle, including the timescales over which they occur, and examine how the properties of sedimentary, igneous and metamorphic rocks reflect their formation and influence their use

Science as a human endeavour

AC9S8H01

explain how new evidence or different perspectives can lead to changes in scientific knowledge

AC9S8H02

investigate how cultural perspectives and world views influence the development of scientific knowledge

AC9S8H03

examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations

Science inquiry

AC9S8I01

develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships

AC9S8I02

plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place

AC9S8I03

select and use equipment to generate and record data with precision, using digital tools as appropriate

AC9S8I04

select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information

AC9S8I05

analyse data and information to describe patterns, trends and relationships and identify anomalies

AC9S8I06

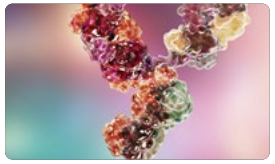
analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions

AC9S8I08

write and create texts to communicate ideas, findings and arguments for specific purposes and audiences, including selection of appropriate language and text features, using digital tools as appropriate

Year 9 – Scope & Sequence

Stile X booklets are available for all units shown except Student Research Project. With Stile X, you can offer support and extension for students in class or give them the tools to review and master knowledge independently.



The Immune System
How can we protect communities from diseases?

Optional extra:
The Endocrine System
Will staring at your phone screen before bed affect your sleep?

Plants
How do predatory plants survive?

The Survival of Species
How do reproductive strategies help a species stay alive?

Earth Systems (Part 1)
How does our planet recycle?

Energy Conservation
Can we use ocean waves to produce electricity?

Optional extra:
Student Research Project

Term 1

Week 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

Unit 1 | Unit 2 | Unit 3 | Optional extra

Term 2

10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18

Unit 4 | Unit 5 | Optional extra

Term 3

Week 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

Unit 6 | Unit 7 | Unit 8

Term 4

10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18

Unit 9 | Unit 10

Light
How can my smartphone be used as a microscope?

Sound
In space no one can hear you scream – or can they?

Non-contact Forces and Electricity
Are we on track for sustainable transport?

Atoms
How can the building blocks of atoms help us see further?

Chemical Reactions
What happens when sodium explodes in water?

Year 9 – Curriculum alignment

	Unit 1 The Immune System	Optional The Endocrine System	Unit 2 Plants
Science understanding	**AC9S9U01** compare the role of body systems in regulating and coordinating the body's response to a stimulus, and describe the operation of a negative feedback mechanism	**AC9S9U01** compare the role of body systems in regulating and coordinating the body's response to a stimulus, and describe the operation of a negative feedback mechanism *This content description is addressed in The Immune System, however The Endocrine System has been included as an optional extra if you wish to examine another example of regulating and coordinating the body's response to a stimulus.*	**AC9S9U02** describe the form and function of reproductive cells and organs in animals and plants, and analyse how the processes of sexual and asexual reproduction enable survival of the species
Science as a human endeavour	**AC9S9H01** explain how scientific knowledge is validated and refined, including the role of publication and peer review **AC9S9H02** investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering **AC9S9H03** analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society **AC9S9H04** examine how the values and needs of society influence the focus of scientific research	**AC9S9H01** explain how scientific knowledge is validated and refined, including the role of publication and peer review **AC9S9H04** examine how the values and needs of society influence the focus of scientific research	**AC9S9H01** explain how scientific knowledge is validated and refined, including the role of publication and peer review
Science inquiry	**AC9S9I01** develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models **AC9S9I02** plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place **AC9S9I03** select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate **AC9S9I04** select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information **AC9S9I05** analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies **AC9S9I06** assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty **AC9S9I07** construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information **AC9S9I08** write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate	**AC9S9I05** analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies **AC9S9I08** write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate	**AC9S9I01** develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models **AC9S9I02** plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place **AC9S9I04** select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information

Year 9 – Curriculum alignment

Unit 3 The Survival of Species

Science understanding

AC9S9U02

describe the form and function of reproductive cells and organs in animals and plants, and analyse how the processes of sexual and asexual reproduction enable survival of the species

Science as a human endeavour

AC9S9H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

AC9S9H04

examine how the values and needs of society influence the focus of scientific research

Science inquiry

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S9I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Unit 4 Earth Systems (Part 1)

Science understanding

AC9S9U03

represent the carbon cycle and examine how key processes including combustion, photosynthesis and respiration rely on interactions between Earth's spheres (the geosphere, biosphere, hydrosphere and atmosphere)

Science as a human endeavour

AC9S9H01

explain how scientific knowledge is validated and refined, including the role of publication and peer review

AC9S9H03

analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society

AC9S9H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

AC9S9H04

examine how the values and needs of society influence the focus of scientific research

Science inquiry

AC9S9I02

plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place

AC9S9I06

assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty

AC9S9I07

construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information

AC9S9I03

select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate

AC9S9I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

AC9S9I04

select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

Unit 5 Energy Conservation

Science understanding

AC9S9U05

apply the law of conservation of energy to analyse system efficiency in terms of energy inputs, outputs, transfers and transformations

Science as a human endeavour

AC9S9H03

analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society

Science inquiry

AC9S9I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Year 9 – Curriculum alignment

Optional Student Research Project

Science understanding

This unit focuses on developing science inquiry skills.

Science as a human endeavour

Science inquiry

AC9S9I01

develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models

AC9S9I02

plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place

AC9S9I03

select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate

AC9S9I04

select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S9I06

assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty

AC9S9I07

construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information

AC9S9I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Unit 6 Light

Science understanding

AC9S9U04

use wave and particle models to describe energy transfer through different mediums and examine the usefulness of each model for explaining phenomena

Science as a human endeavour

AC9S9H01

explain how scientific knowledge is validated and refined, including the role of publication and peer review

AC9S9H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

Science inquiry

AC9S9I02

plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place

AC9S9I03

select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

Unit 7 Sound

Science understanding

AC9S9U04

use wave and particle models to describe energy transfer through different mediums and examine the usefulness of each model for explaining phenomena

This content description is addressed in the Light and Non-contact Forces units, however Sound has been included as an optional extra if you wish to examine another example of energy transfer.

Science as a human endeavour

AC9S9H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

Science inquiry

AC9S9I03

select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S9I06

assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty

AC9S9I07

construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information

Year 9 – Curriculum alignment

Unit 8 Non-contact Forces and Electricity

Science understanding

AC9S9U04

use wave and particle models to describe energy transfer through different mediums and examine the usefulness of each model for explaining phenomena

Science as a human endeavour

AC9S9H01

explain how scientific knowledge is validated and refined, including the role of publication and peer review

AC9S9H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

AC9S9H03

analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society

AC9S9H04

examine how the values and needs of society influence the focus of scientific research

Science inquiry

AC9S9I01

develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models

AC9S9I02

plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place

AC9S9I04

select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S9I06

assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty

AC9S9I07

construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information

AC9S9I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Unit 9 Atoms

Science understanding

AC9S9U06

explain how the model of the atom changed following the discovery of electrons, protons and neutrons and describe how natural radioactive decay results in stable atoms

Science as a human endeavour

AC9S9H01

explain how scientific knowledge is validated and refined, including the role of publication and peer review

AC9S9H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

AC9S9H03

analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society

Science inquiry

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S9I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Unit 10 Chemical Reactions

Science understanding

AC9S9U07

model the rearrangement of atoms in chemical reactions using a range of representations, including word and simple balanced chemical equations, and use these to demonstrate the law of conservation of mass

Science as a human endeavour

AC9S9H03

analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society

AC9S9H04

examine how the values and needs of society influence the focus of scientific research

Science inquiry

AC9S9I01

develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models

AC9S9I02

plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place

AC9S9I03

select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate

AC9S9I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S9I06

assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty

AC9S9I08

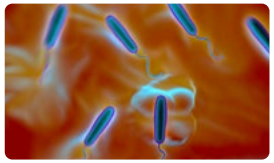
write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Hang ten
Energy transformation creates waves in the ocean for surfers to ride.

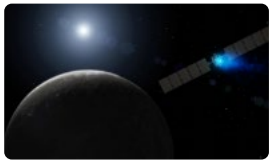
Year 10 – Scope & Sequence

Stile X booklets are available for all units in this scope and sequence. With Stile X, you can offer support and extension for students in class or give them the tools to review and master knowledge independently.

Genetics
Can genes increase the risk of cancer?



Evolution
Are we responsible for the rise of antibiotic-resistant superbugs?



Newton's Laws of Motion
How can we apply Newton's Laws to car crash investigations?

Kinematics
Are self-driving cars the way of the future?

Term 1

Week 1 2 3 4 5 6 7 8 9

Unit 1 | Unit 2

Term 2

10 11 12 13 14 15 16 17 18

Unit 3 | Unit 4

Term 3

Week 1 2 3 4 5 6 7 8 9

Unit 5 | Unit 6

Term 4

10 11 12 13 14 15 16 17 18

Unit 7 | Unit 8

The Periodic Table
How do exploding stars create heavy metals?

Reaction Types
Are self-healing space suits science fiction or just science?

Earth Systems (Part 2) Climate Change
Climate change... Is there even a debate?

The Universe
How do gravitational waves give us a new way of understanding the universe?

Year 10 – Curriculum alignment

	Unit 1 Genetics	Unit 2 Evolution	Unit 3 Newton's Laws of Motion
Science understanding	**AC9S10U01** explain the role of meiosis and mitosis and the function of chromosomes, DNA and genes in heredity and predict patterns of Mendelian inheritance	**AC9S10U02** use the theory of evolution by natural selection to explain past and present diversity and analyse the scientific evidence supporting the theory	**AC9S10U05** investigate Newton's laws of motion and quantitatively analyse the relationship between force, mass and acceleration of objects
Science as a human endeavour	**AC9S10H02** investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering **AC9S10H03** analyse the key factors that contribute to science knowledge and practices being adopted morez broadly by society	**AC9S10H01** explain how scientific knowledge is validated and refined, including the role of publication and peer review **AC9S10H04** examine how the values and needs of society influence the focus of scientific research	**AC9S10H02** investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering **AC9S10H03** analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society
Science inquiry	**AC9S10I08** write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate	**AC9S10I01** develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models **AC9S10I02** plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place **AC9S10I03** select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate **AC9S10I05** analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies **AC9S10I08** write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate	**AC9S10I01** develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models **AC9S10I02** plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place **AC9S10I03** select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate **AC9S10I05** analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies **AC9S10I06** assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty **AC9S10I07** construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information **AC9S10I08** write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Year 10 – Curriculum alignment

	Unit 4 Kinematics	Unit 5 The Periodic Table	Unit 6 Reaction Types
Science understanding	**AC9S10U05** investigate Newton's laws of motion and quantitatively analyse the relationship between force, mass and acceleration of objects	**AC9S10U06** explain how the structure and properties of atoms relate to the organisation of the elements in the periodic table	**AC9S10U07** identify patterns in synthesis, decomposition and displacement reactions and investigate the factors that affect reaction rates
Science as a human endeavour	**AC9S10H02** investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering **AC9S10H03** analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society	**AC9S10H01** explain how scientific knowledge is validated and refined, including the role of publication and peer review	**AC9S10H03** analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society **AC9S10H04** examine how the values and needs of society influence the focus of scientific research
Science inquiry	**AC9S10I02** plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place **AC9S10I03** select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate **AC9S10I04** select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information **AC9S10I05** analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies **AC9S10I06** assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty **AC9S10I07** construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information **AC9S10I08** write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate	**AC9S10I02** plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place **AC9S10I03** select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate	**AC9S10I03** select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate **AC9S10I04** select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information **AC9S10I05** analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies **AC9S10I06** assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty **AC9S10I07** construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information **AC9S10I08** write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Year 10 – Curriculum alignment

Unit 7 Earth Systems (Part 2) Climate Change

Science understanding

AC9S10U04

use models of energy flow between the geosphere, biosphere, hydrosphere and atmosphere to explain patterns of global climate change

Science as a human endeavour

AC9S10H01

explain how scientific knowledge is validated and refined, including the role of publication and peer review

AC9S10H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

AC9S10H03

analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society

AC9S10H04

examine how the values and needs of society influence the focus of scientific research

Science inquiry

AC9S10I02

plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place

AC9S10I03

select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate

AC9S10I04

select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information

AC9S10I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S10I06

assess the validity and reproducibility of methods and evaluate the validity of conclusions and claims, including by identifying assumptions, conflicting evidence and areas of uncertainty

AC9S10I07

construct arguments based on analysis of a variety of evidence to support conclusions or evaluate claims, and consider any ethical issues and cultural protocols associated with accessing, using or citing secondary data or information

AC9S10I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Unit 8 The Universe

Science understanding

AC9S10U03

describe how the big bang theory models the origin and evolution of the universe and analyse the supporting evidence for the theory

Science as a human endeavour

AC9S10H01

explain how scientific knowledge is validated and refined, including the role of publication and peer review

AC9S10H02

investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering

AC9S10H03

analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society

AC9S10H04

examine how the values and needs of society influence the focus of scientific research

Science inquiry

AC9S10I02

plan and conduct valid, reproducible investigations to answer questions and test hypotheses, including identifying and controlling for possible sources of error and, as appropriate, developing and following risk assessments, considering ethical issues, and addressing key considerations regarding heritage sites and artefacts on Country/Place

AC9S10I05

analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies

AC9S10I08

write and create texts to communicate ideas, findings and arguments effectively for identified purposes and audiences, including selection of appropriate content, language and text features, using digital tools as appropriate

Antelope Canyon, Arizona
Antelope Canyon is made up of sandstone which forms when layers of loose sediment are compacted and cemented over time.

Supplementary resources

Metals

How can metals help us fight cancer?

AC9S10U07

identify patterns in synthesis, decomposition and displacement reactions and investigate the factors that affect reaction rates

Radiation

Why is cosmic radiation so dangerous?

AC9S9U06

explain how the model of the atom changed following the discovery of electrons, protons and neutrons and describe how natural radioactive decay results in stable atoms

Optional extra: The Endocrine System

Will staring at your phone screen before bed affect your sleep?

AC9S9U01

compare the role of body systems in regulating and coordinating the body's response to a stimulus, and describe the operation of a negative feedback mechanism

The Nervous System

Could machines sniff out cancers better than dogs?

AC9S9U01

compare the role of body systems in regulating and coordinating the body's response to a stimulus, and describe the operation of a negative feedback mechanism

Simple Machines

How do machines make life easier?

AC9S7U04

investigate and represent balanced and unbalanced forces, including gravitational force, acting on objects, and relate changes in an object's motion to its mass and the magnitude and direction of forces acting on it

Human Impacts on Ecosystems

Are corals going extinct...again?

AC9S7U02

use models, including food webs, to represent matter and energy flow in ecosystems and predict the impact of changing abiotic and biotic factors on populations

Reactions and Energy

How can metals help us fight cancer?

AC9S9U07

model the rearrangement of atoms in chemical reactions using a range of representations, including word and simple balanced chemical equations, and use these to demonstrate the law of conservation of mass

AC9S9U03

represent the carbon cycle and examine how key processes including combustion, photosynthesis and respiration rely on interactions between Earth's spheres (the geosphere, biosphere, hydrosphere and atmosphere)

Supplementary resources

Escape rooms
Engage your students in fun scientific puzzles

Women in STEM career profiles
Explore a range of careers in STEM

Science news lessons
Real-world science based on the news

Skill builders
Lessons to boost your students' science inquiry skills

Student research project
Lessons designed to teach students how to complete scientific research

Chipmunks enjoy red currant berries
Chipmunks eat nuts, seeds, and berries. This makes them primary consumers.

Call us on 1300 918 292

Email us at community@stileeducation.com

Swing by the office to say hi!
Level 5, 128 Exhibition Street, Melbourne, Victoria

Stile HQ is located on the traditional lands of the Boon Wurrung and Woiwurrung (Wurundjeri) peoples of the Kulin Nation. We acknowledge that sovereignty was never ceded and pay our respects to Elders past, present and future.