

# **Scope and Sequence** The Australian Curriculum, Version 9.0

A world class science education for *every* student

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2024 Edition, Version 1

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- Stile helps teachers bring their
- science classes to life with beautiful
- lessons based on real-world science
- and global issues.

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 the following symbols to indicate this:

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 Image:

All units in Stile address the general capabilities

of the Australian Curriculum. We have used



As a science education company, Stile recognises and appreciates the immense knowledge and understandings of both science and education that are held within the Aboriginal and Torres Strait Islander communities.

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.

Learn more from Indigenous astronomer, Karlie Noon Image credit: University of Newcast

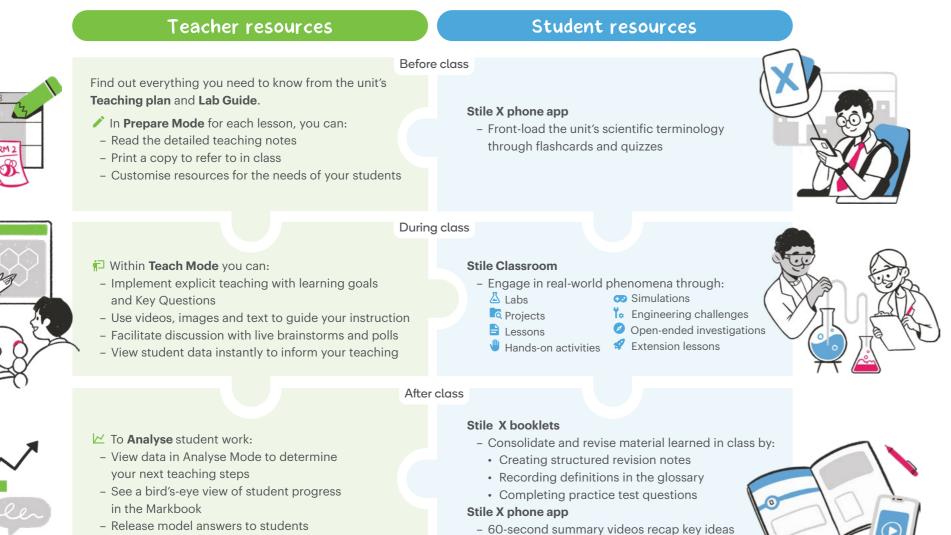


Artist: Tasha McAlpine (née Victor) Language group: Nyul Nyul / Nyikina

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## Everything in one place



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- Provide written feedback where it matters most

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## 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. Our resources are designed to help students be the best learners they can be and to give you the tools to do what you do best: teach.

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.

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.

Call us on 1300 918 292

Email us at community@stileeducation.com

# Year 7

An artist's impression of an astronaut on Mars If humans are to colonise Mars, we'll need to learn how to keep water in the states we can use.



Suggested Scope & Sequence



All units have a Stile X booklet with videos, flashcards and quizzes available in the Stile X app. Find out more about Stile X at <u>stileapp.com/go/stilex</u>

## Year 7 | Science understanding



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

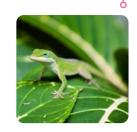


#### States of Matter Why is liquid water so important for humans to live on Mars?

#### 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





#### Forces How can you scale a wall like a gecko?

#### 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



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

#### AC9S7U06

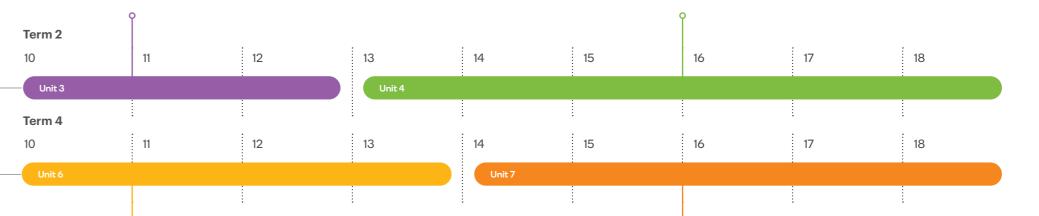
use a particle model to describe differences between pure substances and mixtures and apply understanding of properties of substances to separate mixtures



#### Our Place in Space Can we travel to the Sun?

#### 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





#### Classification and Biodiversity **Do we need to save the bees?**

#### 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



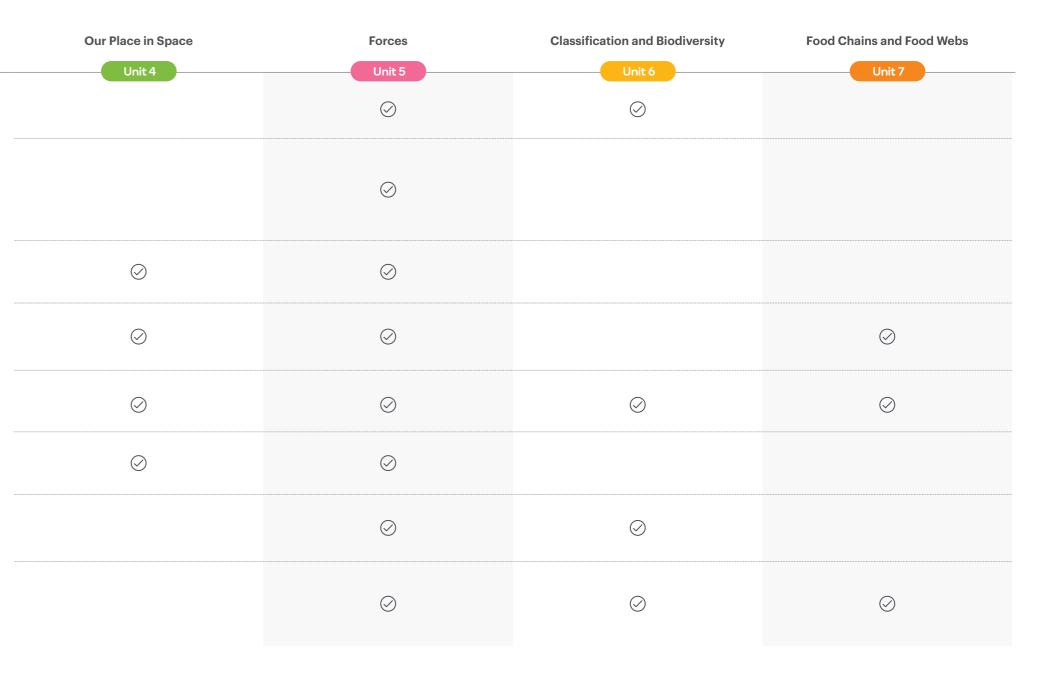
#### Food Chains and Food Webs Why do cats have slit-shaped pupils?

#### 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

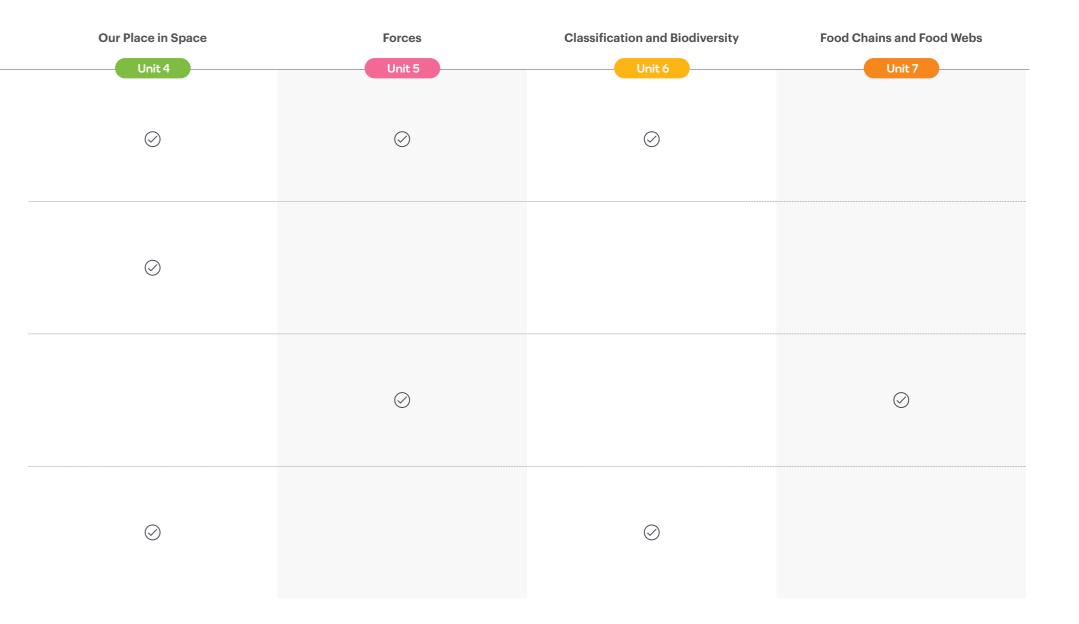
## Year 7 | Science inquiry

		Introduction to Science	States of Matter	Mixtures	
		Unit 1	Unit 2	Unit 3	
AC957101	develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships	$\odot$	$\odot$		
AC957102	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	$\bigotimes$	$\bigotimes$	$\bigcirc$	
AC9S7I03	select and use equipment to generate and record data with precision, using digital tools as appropriate	$\bigotimes$	$\bigcirc$	$\bigcirc$	
AC9S7I04 ≍≣ €	select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information	$\bigotimes$	$\bigotimes$	$\bigcirc$	
AC9S7I05	analyse data and information to describe patterns, trends and relationships and identify anomalies	$\oslash$	$\oslash$	$\oslash$	
AC9S7I06	analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions	$\odot$	$\odot$	$\odot$	
AC9S7107	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	$\bigotimes$			
AC957108	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	$\bigotimes$		$\bigcirc$	



## Year 7 | Science as a human endeavour

		Introduction to Science	States of Matter	Mixtures	
AC957H01	explain how new evidence or different perspectives can lead to changes in scientific knowledge	Unit 1	Unit 2	Unit 3	
АС957H02 Сэ	investigate how cultural perspectives and world views influence the development of scientific knowledge				
АС957Н03 ∵ @	examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations	$\oslash$		$\oslash$	
AC9S7H04	explore the role of science communication in forming individual viewpoints and community policies and regulations	$\oslash$	$\bigcirc$		



# Year 8

Pizza in a wood-fired oven Researchers have found that the magic formula for cooking a pizza is two minutes at about 315°C.

Suggested Scope & Sequence



All units listed, except for Student Research Project, have a Stile X booklet with videos, flashcards and quizzes available in the Stile X app. Find out more about Stile X at <u>stileapp.com/go/stilex</u>



## Year 8 | Science understanding



#### Energy What can we learn from nature's energy engineers?

#### AC9S8U05

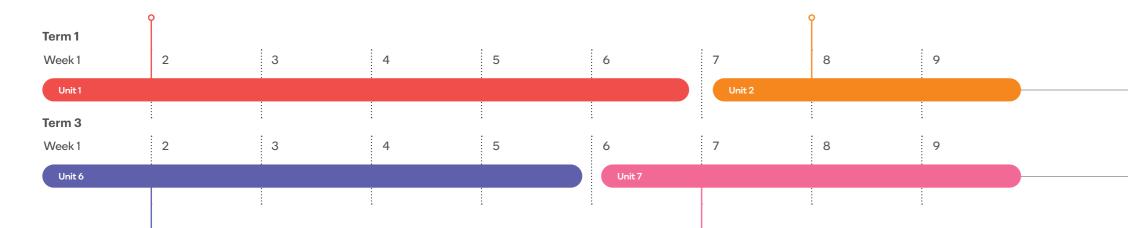
classify different types of energy as kinetic or potential and investigate energy transfer and transformations in simple systems



#### Heat How do you make the best pizza?

AC9S8U05

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





#### Cells Would you eat lab-grown meat?

#### 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



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

#### 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

## Optional Units marked as optional are not required for curriculum coverage, however they are recommended by the Stile team.



## Elements and Compounds Why is helium so rare?

#### 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



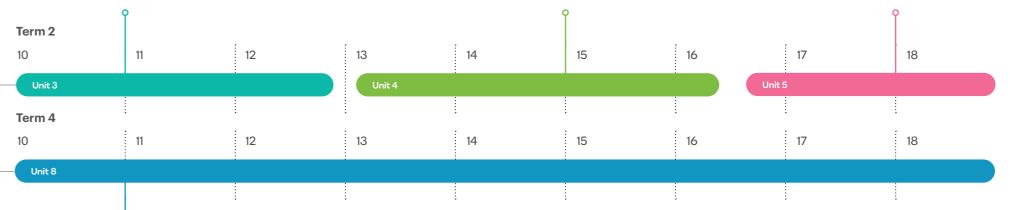
#### Physical and Chemical Change What does chemistry have to do with chocolate making?

#### AC9S8U07

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



Student Research Project





#### Active Earth How do we build future-ready cities?

#### 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

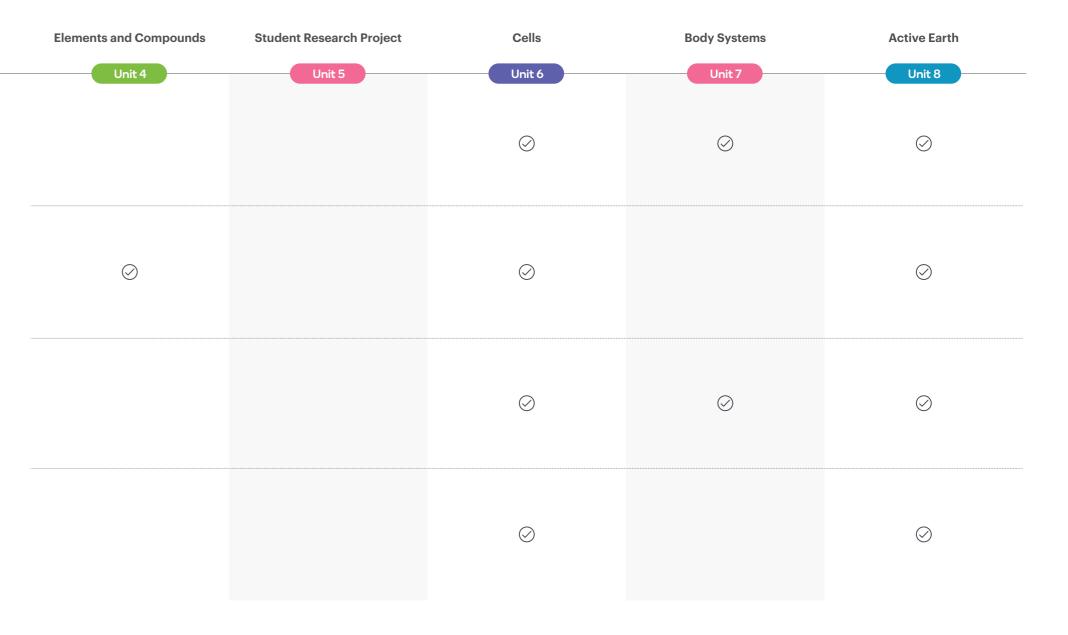
describe the key processes of the rock cycle, including the timescales over which they occur, and examine how the properties of sedimentary, igneous and metamorphic rocks reflect their formation and influence their use

## Year 8 | Science inquiry

	Energy	Heat	Elements and Compounds	Physical and Chemical Change	Student Research Project	Cells	Body Systems	Active Earth
AC9S8101 develop investigable questions, reasoned predictions and hypotheses to explore scientific models, identify patterns and test relationships	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
AC958102 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	$\bigcirc$	$\bigotimes$	$\bigcirc$	$\bigcirc$	$\bigotimes$		$\bigcirc$	$\bigcirc$
AC958103 select and use equipment to generate and record data with precision, using digital tools as appropriate	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigotimes$			$\bigcirc$
AC9S8I04 select and construct appropriate representations, including tables, graphs, models and mathematical relationships, to organise and process data and information	$\bigcirc$	$\bigotimes$	$\bigcirc$		$\bigotimes$		$\bigcirc$	$\bigcirc$
AC958105 analyse data and information to describe patterns, trends and relationships and identify anomalies	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		$\bigcirc$	$\bigcirc$
AC958106 analyse methods, conclusions and claims for assumptions, possible sources of error, conflicting evidence and unanswered questions	$\bigcirc$	$\odot$	$\bigcirc$		$\bigotimes$			
AC9S8107 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		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigotimes$	$\bigcirc$	$\bigcirc$	$\bigcirc$
AC958108 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			$\bigcirc$	$\bigcirc$	$\bigotimes$	$\bigcirc$	$\bigcirc$	$\bigcirc$

## Year 8 | Science as a human endeavour

		Energy	Heat	Physical and Chemical Change	
AC958H01	explain how new evidence or different perspectives can lead to changes in scientific knowledge	Unit 1	Unit 2	Unit 3	
AC958H02	investigate how cultural perspectives and world views influence the development of scientific knowledge				
AC958H03	examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations	$\bigotimes$		$\bigcirc$	
AC958H04	explore the role of science communication in informing individual viewpoints and community policies and regulations				



# Year 9

The aurora borealis or northern lights This beautiful phenomenon is caused by energetic particles from the Sun interacting with the atmosphere, which is one of Earth's four systems. Suggested Scope & Sequence



All units listed, except for Student Research Project, have a Stile X booklet with videos, flashcards and quizzes available in the Stile X app. Find out more about Stile X at <u>stileapp.com/go/stilex</u>



## Year 9 | Science understanding



## Earth Systems How does our planet recycle?

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)



#### The Nervous System How can your gut influence your mood?

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

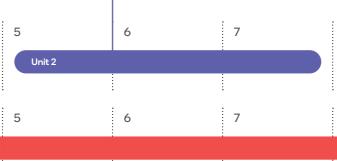


#### The Immune System How can we protect communities from diseases?

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





Unit 3



#### Chemical Reactions What happens when sodium explodes in water?

#### 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



#### Waves

## How does someone on the other side of the world see and hear you?

#### AC9S9U04

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



#### Plants How do predatory plants survive?

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



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

#### AC9S9U02

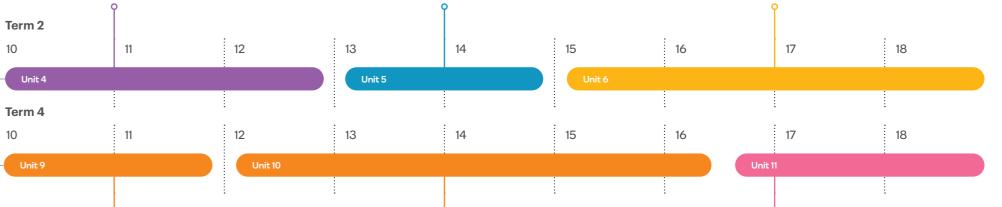
describe the form and function of reproductive cells and organs in animals and plants, and analyse how the processes of sexual and asexual reproduction enable survival of the species



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

#### 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





#### Energy Conservation Can we use ocean waves to produce electricity?

## apply the law of conservation

AC9S9U05

of energy to analyse system efficiency in terms of energy inputs, outputs, transfers and transformations



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

#### AC9S9U04

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



Student Research Project

## Year 9 | Science inquiry

		Earth Systems	The Nervous System	The Immune System	Plants	
		Unit 1	Unit 2	Unit 3	Unit 4	
AC9S9101	develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models		$\oslash$	$\oslash$	$\oslash$	
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	$\oslash$		$\bigotimes$	$\bigcirc$	
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	$\bigotimes$		$\odot$		
AC9S9I04	select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information	$\bigotimes$		$\bigotimes$	$\oslash$	
AC9S9I05	analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies	$\oslash$	$\oslash$	$\oslash$	$\oslash$	
AC9S9106	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	$\bigotimes$	$\bigcirc$	$\bigotimes$		
AC959107	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	$\bigotimes$	$\oslash$	$\oslash$		
AC959108	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	$\oslash$	$\bigcirc$	$\bigotimes$	$\bigcirc$	

The Survival of Species	Atoms	Chemical Reactions	Waves	Energy Conservation	Non-contact Forces and Electricity	Student Research Project
Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11
		$\oslash$	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigcirc$
		$\bigcirc$			$\bigcirc$	$\bigcirc$
		$\bigcirc$				$\bigcirc$
			$\bigcirc$		$\bigcirc$	$\bigcirc$
$\oslash$	$\oslash$	$\oslash$		$\oslash$	$\oslash$	$\oslash$
		$\oslash$				$\oslash$
$\bigotimes$	$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
$\bigotimes$	$\bigcirc$	$\bigotimes$		$\bigotimes$	$\bigcirc$	$\bigcirc$

## Year 9 | Science as a human endeavour

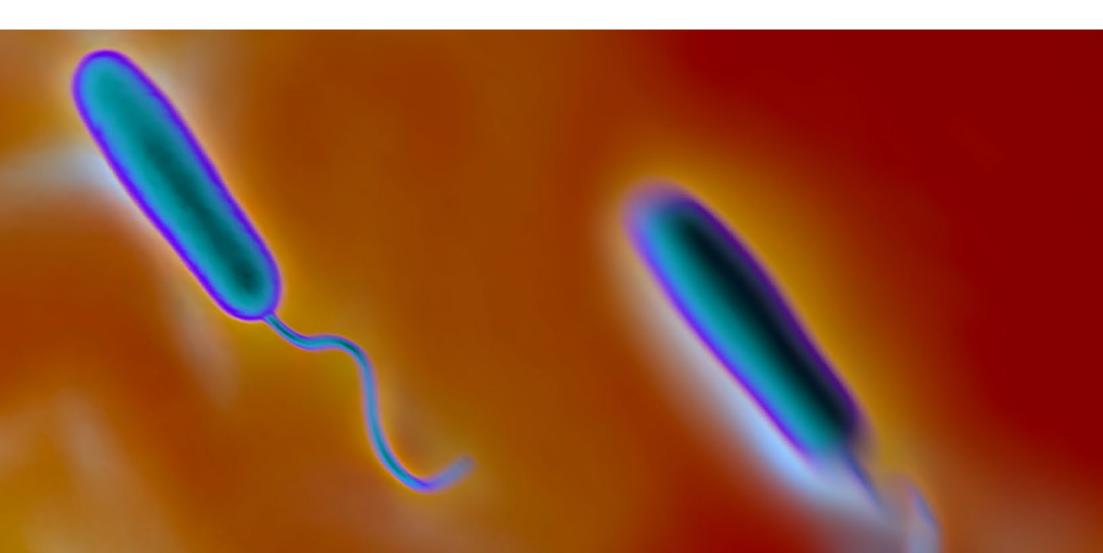
	Earth Systems	The Nervous System	The Immune System	Plants	The Survival of Species	Atoms	<b>Chemical Reactions</b>	Waves	Energy Conservation	Non-contact Forces and Electricity	Student Research Project
AC9S9H01 explain how scientific knowledge is validated and refined, including the role of publication and peer review	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10	Unit 11
AC9S9H02 investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering		$\bigcirc$	$\bigcirc$		$\bigcirc$	$\bigotimes$		$\bigotimes$		$\bigotimes$	
AC9S9H03 analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society	$\bigotimes$	$\oslash$	$\bigcirc$					$\bigotimes$		$\bigotimes$	
AC9S9H04 examine how the values and needs of society influence the focus of scientific research	$\oslash$	$\oslash$	$\oslash$		$\oslash$			$\oslash$	$\oslash$	$\oslash$	

# Year 10

Antibiotic-resistant bacteria Our use of antibiotics has saved countless lives but is also influencing the evolution of bacteria. Suggested Scope & Sequence



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## Year 10 | Science understanding



The Periodic Table How do exploding stars create heavy metals?

#### AC9S10U06

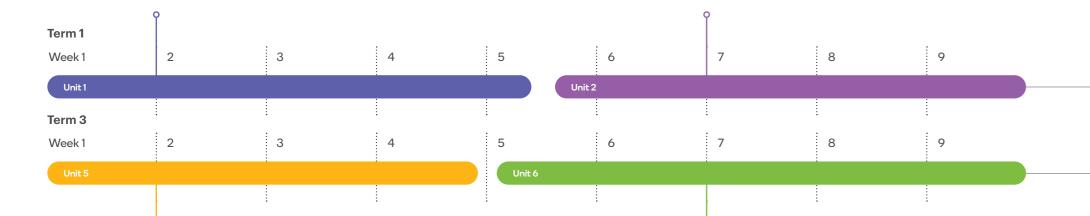
explain how the structure and properties of atoms relate to the organisation of the elements in the periodic table



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

AC9S10U07

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

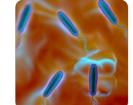




## Genetics Can genes increase the risk of cancer?

AC9S10U01

explain the role of meiosis and mitosis and the function of chromosomes, DNA and genes in heredity and predict patterns of Mendelian inheritance



#### Evolution

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

AC9S10U02

use the theory of evolution by natural selection to explain past and present diversity and analyse the scientific evidence supporting the theory



#### Climate Change Climate change... Is there even a debate?

#### AC9S10U04

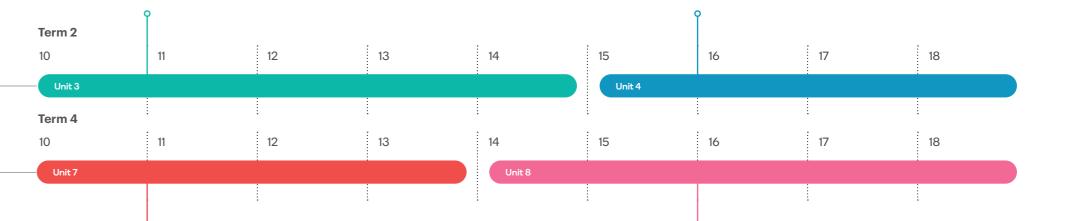
use models of energy flow between the geosphere, biosphere, hydrosphere and atmosphere to explain patterns of global climate change



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

AC9S10U03

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





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

AC9S10U05

investigate Newton's laws of motion and quantitatively analyse the relationship between force, mass and acceleration of objects



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

#### AC9S10U05

investigate Newton's laws of motion and quantitatively analyse the relationship between force, mass and acceleration of objects

## Year 10 | Science inquiry

		The Periodic Table	<b>Reaction Types</b>	Climate Change	
AC9S10101	develop investigable questions, reasoned predictions and hypotheses to test relationships and develop explanatory models	Unit 1	Unit 2	Unit 3	
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			$\bigcirc$	
AC9S10103	select and use equipment to generate and record data with precision to obtain useful sample sizes and replicable data, using digital tools as appropriate	$\bigotimes$	$\bigcirc$	$\bigcirc$	
AC9S10104	select and construct appropriate representations, including tables, graphs, descriptive statistics, models and mathematical relationships, to organise and process data and information		$\bigcirc$	$\bigcirc$	
AC9S10105	analyse and connect a variety of data and information to identify and explain patterns, trends, relationships and anomalies	$\oslash$	$\oslash$	$\oslash$	
AC9S10106	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			$\bigcirc$	
AC9510107	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		$\bigcirc$	$\bigcirc$	
AC9510108	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	$\bigotimes$	$\bigcirc$	$\bigcirc$	

The Universe	Genetics	Evolution	Newton's Laws of Motion	Kinematics
Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
		$\bigcirc$	$\bigcirc$	
$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigotimes$
	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\oslash$
				$\bigotimes$
$\oslash$		$\bigcirc$	$\oslash$	$\oslash$
			$\bigcirc$	$\bigotimes$
			$\bigcirc$	$\bigotimes$
$\bigotimes$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigotimes$

## Year 10 | Science as a human endeavour

		The Periodic Table	<b>Reaction Types</b>	Climate Change	
AC9510H01	explain how scientific knowledge is validated and refined, including the role of publication and peer review	Unit 1	Unit 2	Unit 3	
АС9510H02	investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering			$\bigcirc$	
AC9510H03	analyse the key factors that contribute to science knowledge and practices being adopted more broadly by society			$\bigcirc$	
AC9S10H04	examine how the values and needs of society influence the focus of scientific research		$\bigotimes$	$\bigcirc$	

The Universe	Genetics	Evolution	Newton's Laws of Motion	Kinematics
Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
$\bigotimes$		$\bigotimes$		
$\oslash$	$\oslash$	$\bigcirc$	$\bigcirc$	$\bigotimes$
$\oslash$	$\oslash$		$\bigcirc$	$\bigcirc$
$\bigotimes$		$\bigcirc$		

## Supplementary units

These units can be used in addition to those within the scope and sequence to elaborate on the content descriptors listed.

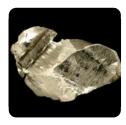
AC9S10U07



#### Acids and Bases Why are our oceans becoming more acidic?

#### 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



#### Metals How can metals help us fight cancer?

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



## 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



## Electrical circuits How can wearable electronics help us?

#### AC9S9U04

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



#### Resources

How has our use of resources changed over time?

#### 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



#### 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



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

#### AC9S9U04

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



## Classification Why do zebras have stripes?

#### AC9S7U01

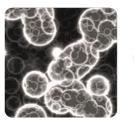
investigate the role of classification in ordering and organising the diversity of life on Earth and use and develop classification tools including dichotomous keys



## The Water Cycle Would you ever drink your own urine?

#### 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



## Reproduction Which was the first species to have sex?

#### 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



#### Ecosystems

#### How can we prevent plastic from harming marine life?

#### 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)



## Can you turn your smartphone into a microscope?

#### AC9S9U04

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



#### 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

## Supporting resources

Use these units to support students' learning beyond the science understanding strand of the Australian Curriculum.



Skill builders Lessons to boost your students' science inquiry skills



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



Science news lessons Real-world science based on the news



Breaking news lessons Short, literacy-focused lessons about news you need to know



Escape rooms Engage your students in fun scientific puzzles



Teacher Resources and Templates Useful resources to help you get the most out of Stile stileeducation.com

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S.

- 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.