

Curriculum Links

Level 3 - 4

Ministry of Education

The NZ Curriculum

SCIENCE – Overall Achievement Objectives for all Curriculum Levels

Achievement Aims: Nature of Science	
Understanding about science	Learn about science as a knowledge system: the features of scientific knowledge and the processes by which it is developed; and learn about the ways in which the work of scientists interacts with society.
Investigating in science	Carry out science investigations using a variety of approaches: classifying and identifying, pattern seeking, exploring, investigating models, fair testing, making things, or developing systems.
Communicating in science	Develop knowledge of the vocabulary, numeric and symbol systems, and conventions of science and use this knowledge to communicate about their own and others' ideas.
Participating and contributing	Bring a scientific perspective to decisions and actions as appropriate.
Achievement Aims: Living World	
Life processes	Understand the processes of life and appreciate the diversity of living things.
Ecology	Understand how living things interact with each other and with the non-living environment.
Evolution	Understand the processes that drive change in groups of living things over long periods of time and be able to discuss the implications of these changes.
Achievement Aims: Planet Earth and Beyond	
Earth systems	Investigate and understand the spheres of the Earth system: geosphere (land), hydrosphere (water), atmosphere (air), and biosphere (life).
Interacting systems	Investigate and understand that the geosphere, hydrosphere, atmosphere, and biosphere are connected via a complex web of processes.
Astronomical systems	Investigate and understand relationships between the Earth, Moon, Sun, solar system, and other systems in the universe.
Achievement Aims: Physical World	
Physical inquiry and physics concepts	Explore and investigate physical phenomena in everyday situations.
Physical concepts	Gain an understanding of the interactions that take place between different parts of the physical world and the ways in which these interactions can be represented.
Using physics	Apply their understanding of physics to various applications.
Achievement Aims: Material World	
Properties and changes of matter	Investigate the properties of materials.
The structure of matter	Interpret their observations in terms of the particles (atoms, molecules, ions, and sub-atomic particles), structures, and interactions present.
Chemistry and society	Make connections between the concepts of chemistry and their applications and show an understanding of the role chemistry plays in the world around them.

Ministry of Education (2014). The NZ Curriculum: Science, Achievement Objectives. Retrieved online from <http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Science/Achievement-objectives>

SCIENCE – Achievement Objectives

LEVEL 3 and 4

Key Learning Areas	Teaching and Learning Objectives
<i>Nature of Science</i>	
Understanding about science	<p>Appreciate that science is a way of explaining the world and that science knowledge changes over time.</p> <p>Identify ways in which scientists work together and provide evidence to support their ideas.</p>
Investigating in science	<p>Build on prior experiences, working together to share and examine their own and others' knowledge.</p> <p>Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations.</p>
Communicating in science	<p>Begin to use a range of scientific symbols, conventions, and vocabulary.</p> <p>Engage with a range of science texts and begin to question the purposes for which these texts are constructed.</p>
Participating and contributing	<p>Use their growing science knowledge when considering issues of concern to them.</p> <p>Explore various aspects of an issue and make decisions about possible actions.</p>
<i>Living World</i>	
Life processes	Recognise that there are life processes common to all living things and that these occur in different ways.
Ecology	Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.
Evolution	<p>Begin to group plants, animals, and other living things into science-based classifications.</p> <p>Explore how the groups of living things we have in the world have changed over long periods of time and appreciate that some living things in New Zealand are quite different from living things in other areas of the world.</p>
<i>Planet Earth and Beyond</i>	
Earth systems	Appreciate that water, air, rocks and soil, and life forms make up our planet and recognise that these are also Earth's resources.
Interacting systems	Investigate the water cycle and its effect on climate, landforms, and life.
<i>Physical World</i>	
Physical inquiry and physics concepts	Explore, describe, and represent patterns and trends for everyday examples of physical phenomena, such as movement, forces, electricity and magnetism, light, sound, waves, and heat. For example, identify and describe the effect of forces (contact and non-contact) on the motion of objects; identify and

	describe everyday examples of sources of energy, forms of energy, and energy transformations.
Material World	
Properties and changes of matter	Group materials in different ways, based on the observations and measurements of the characteristic chemical and physical properties of a range of different materials. Compare chemical and physical changes.
Chemistry and society	Relate the observed, characteristic chemical and physical properties of a range of different materials to technological uses and natural processes.

Ministry of Education (2014). The NZ Curriculum: Science, Achievement Objectives Levels 3 and 4. Retrieved online from <http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Science/Achievement-objectives>

Social Science – Achievement Objectives

LEVEL 3

Key Learning Areas Teaching and Learning Objectives
Understand how groups make and implement rules and laws.
Understand how cultural practices vary but reflect similar purposes.
Understand how people view and use places differently.
Understand how people make decisions about access to and use of resources.
Understand how people remember and record the past in different ways.

Ministry of Education (2014). The NZ Curriculum: Social Sciences, Achievement Objectives Level 3. Retrieved online from <http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Social-sciences/Achievement-objectives>

Social Science – Achievement Objectives

LEVEL 4

Key Learning Areas Teaching and Learning Objectives
Understand how the ways in which leadership of groups is acquired and exercised have consequences for communities and societies.
Understand how exploration and innovation create opportunities and challenges for people, places, and environments.
Understand how formal and informal groups make decisions that impact on communities.
Understand how people participate individually and collectively in response to community challenges.

Ministry of Education (2014). The NZ Curriculum: Social Sciences, Achievement Objectives Level 4. Retrieved online from <http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Social-sciences/Achievement-objectives>

Personal Health and Physical Education – Achievement Objectives

LEVEL 3

Key Learning Areas Teaching and Learning Objectives
Identify risks and their causes and describe safe practices to manage these.

Ministry of Education (2014). The NZ Curriculum: Health and Physical Education, Achievement Objectives Level 3. Retrieved online from <http://nzcurriculum.tki.org.nz/The-New-Zealand-Curriculum/Health-and-physical-education/Achievement-objectives>