Te Ao Tūroa and *The New Zealand Curriculum (NZC)*

This is flexible learning resource package that provides three related systems as rich contexts for learning across the Health and Physical Education, Science, Social Science, and Technology learning areas for **Levels 1 & 2**, **Levels 3 & 4**, and **Levels 4 & 5**. These systems are important to the primary industry sector of Aotearoa-New Zealand, and to the general well-being of our people and natural resources today and into the future.

The three systems are:
- Animal welfare
- Biosecurity
- Food

The suggested activities can also be used to support literacy and numeracy, as well as a starting context for other learning areas. They are not designed to be taught in a prescribed way, but have been designed to be adapted to the needs of your learners and community.

The NZC sets the direction for teaching and learning in schools, outlining the values, key competencies, and outcomes that your school must consider when designing your curriculum and the principles on which you will base your decisions.

Principles and key competencies

The learning activities in this resource support the principles of *The NZC* with an emphasis on **community engagement**, **coherence**, and **future focus**. This resource also provides a framework for teachers to design learning to allow students to develop all five **key competencies**.

Learning areas and achievement objectives

The suggested learning activities in Te Ao Tūroa have been grouped into three themes to provide students' opportunity to meet specific achievement objectives across Level 1-2, 3-4 and 4-5 of The NZC within the learning areas of Health and Physical Education, Science, Social Science, and Technology.

Theme 1: Parts, processes and Pathways – Level 1 and 2

Health and Physical Education – Safety management

Level 1	Identify and discuss obvious hazards in their home, school, and local environment and adopt simple safety practices.
Level 2	Identify risk and use safe practices in a range of contexts.

Science – Nature of Science (NoS) and the Living World (LW)

Levels 1 and 2	**NoS** Extend their experiences and personal explanations of the natural world through exploration, play, asking questions, and discussing simple models. Explore and act on issues and questions that link science learning to their daily living. **LW** Recognise that all living things have certain requirements so they can stay alive. Recognise that living things are suited to their particular habitat.

Social Studies – Identity, Culture and Organisation and Continuity and Change

Level 1	Understand that people have different roles and responsibilities as part of their participation in groups.
Level 2	Understand how people make significant contributions to New Zealand's society. Understand how the status of Māori as tangata whenua is significant for communities in New Zealand.

Technology – Nature of Technology (NoT) and Technological Practice (TP)

Level 1	**NoT** Understand that technology is purposeful intervention through design (**Characteristics of Technology**). Understand that technological outcomes are products or systems developed by people and have a physical nature and a functional nature (**Characteristics of Technological Outcomes**). **TP** Outline a general plan to support the development of an outcome, identifying appropriate steps and resources (**Brief Development**). Describe the outcome they are developing and identify the attributes it should have, taking account of the need or opportunity and the resources available (**Planning for Practice**). Investigate a context to communicate potential outcomes. Evaluate these against attributes; select and develop an outcome in keeping with the identified attributes (**Outcome Development and Evaluation**).
Level 2	**NoT** Understand that technology both reflects and changes society and the environment and increases people's capability (**Characteristics of Technology**). Understand that technological outcomes are developed through technological practice and have related physical and functional natures (**Characteristics of Technological Outcomes**). **TP** Explain the outcome they are developing and describe the attributes it should have, taking account of the need or opportunity and the resources available (**Brief Development**). Develop a plan that identifies key stages and resources required to complete an outcome (**Planning for Practice**). Investigate a context to develop ideas for potential outcomes. Evaluate these against the identified attributes; select and develop an outcome. Evaluate the outcome in terms of the need or opportunity (**Outcome Development and Evaluation**).

Theme 2: He Tangata, He Tangata Level 3-4

Health and Physical Education – Safety management

Level 3	Identify risks and their causes and describe safe practices to manage these.
Level 4	Access and use information to make and action safe choices in a range of contexts.

Science – Nature of Science (NoS) and the Living World (LW)

Levels 3 and 4	**NoS** Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations. Use their growing science knowledge when considering issues of concern to them. Explore various aspects of an issue and make decisions about possible actions. **LW** Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.

Social Studies – Identity, Culture and Organisation and Continuity and Change

Level 3	Understand how people make decisions about access to and use of resources
Level 4	Understand that events have causes and effects. Understand how people participate individually and collectively in response to community challenges.

Technology – Nature of Technology (NoT) and Technological Practice (TP)

Level 3	**NoT** Understand how society and environments impact on and are influenced by technology in historical and contemporary contexts and that technological knowledge is validated by successful function (**Characteristics of Technology**). Understand that technological outcomes are recognisable as fit for purpose by the relationship between their physical and functional natures (**Characteristics of Technological Outcomes**). **TP** Describe the nature of an intended outcome, explaining how it addresses the need or opportunity. Describe the key attributes that enable development and evaluation of an outcome (**Brief Development**). Undertake planning to identify the key stages and resources required to develop an outcome. Revisit planning to include reviews of progress and identify implications for subsequent decision making (**Planning for Practice**). Investigate a context to develop ideas for potential outcomes. Trial and evaluate these against key attributes to select and develop an outcome to address the need or opportunity. Evaluate this outcome against the key attributes and how it addresses the need or opportunity (**Outcome Development and Evaluation**).

Level 4	**NoT**
	Understand how technological development expands human possibilities and how technology draws on knowledge from a wide range of disciplines (**Characteristics of Technology**).
	Understand that technological outcomes can be interpreted in terms of how they might be used and by whom and that each has a proper function as well as possible alternative functions (**Characteristics of Technological Outcomes**).
	TP
	Justify the nature of an intended outcome in relation to the need or opportunity. Describe the key attributes identified in stakeholder feedback, which will inform the development of an outcome and its evaluation (**Brief Development**).
	Undertake planning that includes reviewing the effectiveness of past actions and resourcing, exploring implications for future actions and accessing of resources, and consideration of stakeholder feedback, to enable the development of an outcome (**Planning for Practice**).
	Investigate a context to develop ideas for feasible outcomes. Undertake functional modelling that takes account of stakeholder feedback in order to select and develop the outcome that best addresses the key attributes. Incorporating stakeholder feedback, evaluate the outcome's fitness for purpose in terms of how well it addresses the need or opportunity (**Outcome Development and Evaluation**).

Theme 3: Ethics, Economics and the Environment – Level 4-5

Health and Physical Education – Safety management (SM); Rights, responsibilities and laws (RRL); people and the environment (PE)

Level 4	**(SM)** A1 Access and use information to make and action safe choices in a range of contexts. **(RRL and PE)** D3/4 Specify individual responsibilities and take collective action for the care and safety of other people in their school and in the wider community.
Level 5	**(SM)** A3 Investigate and practise safety procedures and strategies to manage risk situations. **(RRL and PE)** **(RRL and PE)** D3 Identify the rights and responsibilities of consumers and use this information to evaluate health and recreational services and products in our community.

Science – Nature of Science (NoS) and the Living World (LW)

Level 4	**NoS** Build on prior experiences, working together to share and examine their own and others' knowledge. Ask questions, find evidence, explore simple models, and carry out appropriate investigations to develop simple explanations. Engage with a wide range of science texts. **(LW)** Begin to group plants, animals, and other living things into science based classifications.
Level 5	**NoS** Understand that scientists' investigations are informed by current scientific theories and aim to collect evidence that will be interpreted through processes of logical argument. Use a wider range of science vocabulary, symbols, and conventions. Develop an understanding of socio-scientific issues by gathering relevant scientific information in order to draw evidence-based conclusions and to take action where appropriate. **(LW)** Investigate the interdependence of living things (including humans) in an ecosystem.

Social Studies – Identity, Culture and Organisation and Continuity and Change

Level 4	Understand how innovation creates opportunities and challenges for people, places, and environments. Understand how producers and consumers exercise their rights and meet their responsibilities.
Level 5	Understand how economic decisions impact on people, communities, and nations. Understand how people's management of resources impacts on environmental and social sustainability. Understand how people seek and have sought economic growth through business, enterprise, and innovation.

Technology – Nature of Technology (NoT) and Technological Practice (TP)

Level 4	**NoT** Understand how technological development expands human possibilities and how technology draws on knowledge from a wide range of disciplines (**Characteristics of Technology**). Understand that technological outcomes can be interpreted in terms of how they might be used and by whom and that each has a proper function as well as possible alternative functions (**Characteristics of Technological Outcomes**).

	TP Justify the nature of an intended outcome in relation to the need or opportunity. Describe the key attributes identified in stakeholder feedback, which will inform the development of an outcome and its evaluation (**Brief Development**). Investigate a context to develop ideas for feasible outcomes. Undertake functional modelling that takes account of stakeholder feedback in order to select and develop the outcome that best addresses the key attributes. Incorporating stakeholder feedback, evaluate the outcome's fitness for purpose in terms of how well it addresses the need or opportunity (**Outcome Development and Evaluation**).
Level 5	**NoT** Understand how people's perceptions and acceptance of technology impact on technological developments and how and why technological knowledge becomes codified (**Characteristics of Technology**). Understand that technological outcomes are fit for purpose in terms of time and context (**Characteristics of Technological Outcomes**). TP Justify the nature of an intended outcome in relation to the need or opportunity. Describe specifications that reflect key stakeholder feedback and that will inform the development of an outcome and its evaluation. (**Brief Development**). Analyse their own and others' outcomes to inform the development of ideas for feasible outcomes. Undertake ongoing functional modelling and evaluation that takes account of key stakeholder feedback and trialling in the physical and social environments. Use the information gained to select and develop the outcome that best addresses the specifications. Evaluate the final outcome's fitness for purpose against the brief. (**Outcome Development and Evaluation**).