



# EDUCATION PROGRAMME ACHIEVEMENT OBJECTIVES

## CONTENTS

ACHIEVEMENT OBJECTIVES .....	1
OVERARCHING ACHIEVEMENT OBJECTIVES .....	2
LEVELS ONE AND TWO .....	3
LEVELS THREE AND FOUR .....	4
LEVEL FIVE .....	5
LEVEL SIX .....	6

Science is the key curriculum area for a visit to Central Energy Trust Wildbase Recovery, however teachers may choose to develop AOs in other curriculum areas.

The achievement objectives within Science that are met during a visit to our centre are highlighted below, the overarching AO's and for each level.

KEY CURRICULUM AREA	OTHER CURRICULUM LINKS
Science	Social Science, English, Mathematics, Technology, Te Reo Maori, The Arts, Health and PE.



## OVERARCHING ACHIEVEMENT OBJECTIVES

Nature of Science: Students will

UNDERSTANDING ABOUT SCIENCE	INVESTIGATING IN SCIENCE	COMMUNICATING IN SCIENCE	PARTICIPATING AND CONTRIBUTING
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.	Carry out science investigations using a variety of approaches: classifying and identifying, pattern seeking, exploring, investigating models, fair testing, making things, or developing systems.	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.	Bring a scientific perspective to decisions and actions as appropriate.

Living World: Students will

LIFE PROCESSES	ECOLOGY	EVOLUTION
Understand the processes of life and appreciate the diversity of living things.	Understand how living things interact with each other and with the non-living environment.	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.

KEY COMPETENCIES	THE FIVE SCIENCE CAPABILITIES
<ul style="list-style-type: none"> <li>• Thinking;</li> <li>• Using Language;</li> <li>• Symbols and text;</li> <li>• Managing self;</li> <li>• Relating to others;</li> <li>• Participating and contributing.</li> </ul>	<ul style="list-style-type: none"> <li>• Gather and interpret data;</li> <li>• Use evidence;</li> <li>• Critique evidence;</li> <li>• Interpret representations;</li> <li>• Engage with Science.</li> </ul>

## LEVELS ONE AND TWO

### ACHIEVEMENT OBJECTIVES

#### Nature of Science: Students will

UNDERSTANDING ABOUT SCIENCE	INVESTIGATING IN SCIENCE	COMMUNICATING IN SCIENCE	PARTICIPATING AND CONTRIBUTING
Appreciate that scientists ask questions about our world that lead to investigations and that open-mindedness is important because there may be more than one explanation.	Extend their experiences and personal explanations of the natural world through exploration, play, asking questions, and discussing simple models.	Build their language and develop their understandings of the many ways the natural world can be represented.	Explore and act on issues and questions that link their science learning to their daily living.

#### Living World: Students will

LIFE PROCESSES	ECOLOGY	EVOLUTION
Recognise that all living things have certain requirements so they can stay alive.	Recognise that living things are suited to their particular habitat.	Recognise that there are lots of different living things in the world and that they can be grouped in different ways.  Explain how we know that some living things from the past are now extinct.



## LEVELS THREE AND FOUR

### ACHIEVEMENT OBJECTIVES

#### Nature of Science: Students will

UNDERSTANDING ABOUT SCIENCE	INVESTIGATING IN SCIENCE	PARTICIPATING AND CONTRIBUTING
Identify ways in which scientists work together and provide evidence to support their ideas.	Build on prior experiences, working together to share and examine their own and others' knowledge.	Use their growing science knowledge when considering issues of concern to them.  Explore various aspects of an issue and make decisions about possible actions.

#### Living World: Students will

ECOLOGY	EVOLUTION
Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and induced.	Begin to group plants, animals, and other living things into science-based classifications.  Explore how groups of living things have changed over long periods of time and appreciate that some living things in NZ are quite different from living things in other areas of the world.



## LEVEL FIVE

### ACHIEVEMENT OBJECTIVES

Nature of Science: Students will

UNDERSTANDING ABOUT SCIENCE	PARTICIPATING AND CONTRIBUTING
Understand that scientists' investigations are informed by current scientific theories and aim to collect evidence that will be interpreted through processes of logical argument.	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.

Living World: Students will

ECOLOGY
Investigate the interdependence of living things (including humans) in an ecosystem.

## LEVEL SIX

### ACHIEVEMENT OBJECTIVES

Nature of Science: *Students will*

UNDERSTANDING ABOUT SCIENCE	PARTICIPATING AND CONTRIBUTING
Understand that scientists' investigations are informed by current scientific theories and aim to collect evidence that will be interpreted through processes of logical argument.	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.

Living World: *Students will*

ECOLOGY
Investigate the impact of natural events and human actions on a New Zealand ecosystem.