EDUCATION PROGRAMME ACHIEVEMENT OBJECTIVES



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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

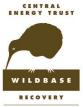
Nature of Science: Students will

| UNDERSTANDING | INVESTIGATING IN | COMMUNICATING | PARTICIPATING AND | H MASSET UN |
|--|---|---|--|-------------|
| ABOUT SCIENCE | SCIENCE | IN SCIENCE | CONTRIBUTING | PALMERSTOP |
| 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 |
|---|---|
| Thinking; Using Language; Symbols and text; Managing self; Relating to others; Participating and contributing. | Gather and interpret data; Use evidence; Critique evidence; Interpret representations; Engage with Science. |



| Nature of Science: Students will | | | |
|---|---|---|--|
| INVESTIGATING IN SCIENCE | COMMUNICATING IN SCIENCE | PARTICIPATING AND CONTRIBUTING | |
| 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. | |
| | SCIENCE Extend their experiences and personal explanations of the natural world through exploration, play, asking questions, and discussing simple | SCIENCEIN SCIENCEExtend theirBuild theirexperiences andlanguage andpersonal explanationsdevelop theirof the natural worldunderstandings ofthrough exploration,the many ways theplay, asking questions,natural world canand discussing simplebe represented. | |

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. |



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. |

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.

Nature of Science: Students will



| UNDERSTANDING ABOUT SCIENCE | PARTICIPATING AND CONTRIBUTING |
|---|--|
| Understand that scientists' investigations are | Develop an understanding of socio-scientific |
| informed by current scientific theories and aim | issues by gathering relevant scientific |
| to collect evidence that will be interpreted | information in order to draw evidence-based |
| through processes of logical argument. | 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.