

Possible Science Curriculum Links and Focus Areas for Levels 1,2,3,4.

Living World

LEVEL	ACHIEVEMENT OBJECTIVE	USING KELLY TARLTON'S TO MEET THIS OBJECTIVE
1 & 2 Life Processes	Recognise that all living things have certain requirements so they can stay alive.	<ul style="list-style-type: none"> Parts of sharks, parts of fish, parts of marine invertebrates and other creatures of the rocky shore. Life cycles of marine invertebrates and fish (living in the plankton then 'graduating' to the reef).
1 & 2 Evolution	Recognise that there are lots of different living things in the world and that they can be grouped in different ways.	Simple classification of marine animals (e.g. those with and without a backbone).
1 & 2 Ecology	Recognise that living things are suited to their particular habitat.	Inter-tidal life - coping with extremes of salinity and temperature. Penguins – coping with extreme conditions.
3 & 4 Life Processes	Recognise that there are life processes common to all living things and that these occur in different ways.	<ul style="list-style-type: none"> The life cycles of marine animals and their interdependence on each other. Reproductive and breeding strategies of marine animals, which ensure survival of offspring. Reproductive and breeding strategies of penguins which ensure survival of offspring.
3 & 4 Ecology	Explain how living things are suited to their particular habitat and how they respond to environmental changes, both natural and human-induced.	<ul style="list-style-type: none"> Special features of sharks, fish, marine invertebrates and plants, which enable them to survive in their unique environments Special features of Penguins which enable them to survive in their unique environment. Antarctic food webs, and the profound effects that humans have had, or may have on these food webs Marine food webs (the rocky shore, the deep sea), and the profound effects that humans have had, or may have on these food webs
3 & 4 Evolution	Begin to group plants, animals, and other living things into science-based classifications.	<ul style="list-style-type: none"> Classification and differences between different types of marine animals, and differences between different types of sharks and fish Different types of marine animals e.g. mussels, pipis, cockles - what makes them all bivalves?

Material World

LEVEL	ACHIEVEMENT OBJECTIVE	USING KELLY TARLTON'S TO MEET THIS OBJECTIVE
1 & 2	Find out about the uses of common materials and relate these to their observed	<ul style="list-style-type: none"> For example what do you take to go fishing, diving,.

Chemistry & Society	properties.	<ul style="list-style-type: none"> • What do you wear to go to the Antarctic
3 & 4 Chemistry & Society	Relate the observed characteristic chemical and physical properties of a range of different materials to technological uses and natural processes.	<ul style="list-style-type: none"> • The different tools, clothing and machinery used in Antarctica. How it has been adapted to suit the harsh environment and how it has changed over time.

Planet Earth and Beyond

LEVEL	ACHIEVEMENT OBJECTIVE	USING KELLY TARLTON'S TO MEET THIS OBJECTIVE
1 & 2 Earth Systems	Explore and describe natural features and resources.	<ul style="list-style-type: none"> • The natural features and resources of the amazing continent of Antarctica. • The tides and currents of our oceans and how these allow life to survive.
1 & 2 Interacting Systems	Describe how natural features are changed and resources affected by natural events and human actions.	The effects of pollution and litter in the marine environment, oil spills in Antarctica and the ocean.
1 & 2 Astronomical Systems	Share ideas and observations about the Sun and the Moon and their physical effects on the heat and light available to earth.	The effect the sun has on the world's oceans and how this contributes to the oceans diversity of life.
3 & 4 Earth Systems	Appreciate (Develop an understanding) that water, air, rocks and soil, and life forms make up our planet and recognise that these are also earth's resources.	The resources that make up the Antarctic continent and how these resources are protected/utilised.
3 & 4 Interacting Systems	Investigate the water cycle and its effect on climate, landforms and life.	The Antarctic water cycle

Physical World

LEVEL	ACHIEVEMENT OBJECTIVE	USING KELLY TARLTON'S TO MEET THIS OBJECTIVE
1 & 2 Physical inquiry and physics concepts	Seek and describe simple patterns in physical phenomena.	The ocean waves, how they are created and where the energy is released.
3 & 4 Physical inquiry and physics concepts	Explore, describe, and represent patterns and trends for everyday examples of physical phenomena such as movement, forces, electricity, sound, waves, and heat.	The impacts of physical phenomena on the worlds oceans. How the sun and wind effect the oceans of the world.