

## Queensland Years 1-7 Science Outcomes for Earth Quest

### Level One

STRAND	OUTCOMES	EARTH QUEST EXHIBITS
<p>Science and Society</p> <p>Students describe their ideas about natural phenomena. They understand that information is collected in different ways to suit different purposes. Students understand some of the ways that science is applied in their daily lives.</p>	<p>1.1 Students discuss their own thinking about natural phenomena.</p>	All exhibits
<p>Earth and Beyond</p> <p>Students understand that there are significant features on the Earth and in the sky. They understand that aspects of their immediate environment change and that this environment is a resource.</p>	<p>1.1 Students identify and describe obvious features of the Earth and sky (including landforms and clouds).</p>	<p>Making Mountains Spinning Sun Volcanoes What Weather?</p>
	<p>1.2 Students describe obvious events (including day and night) that occur on the Earth and in the sky.</p>	<p>Seasons in a Spin Turn the Tides</p>
	<p>1.3 Students discuss the uses they make and the care they take of the Earth</p>	Ozone
	<p>D1.4 Students describe some less obvious features of the Earth and beyond</p>	<p>Air Pressure Galaxy Gaze Ozone Size of Planets Swirled World The Air Up There The Solar System</p>
<p>Life and Living</p> <p>Students understand that living things have needs. They understand that different living things and different environments have different identifying features.</p>	<p>1.1 Students discuss their thinking about needs of living things.</p>	<p>Food Pyramids Living Cells Plants in Place</p>
	<p>1.2 Students group living things in different ways based on observable features.</p>	<p>Deep Sea Glow Evolution Plants in Place</p>
	<p>1.3 Students observe and describe components of familiar environments.</p>	Landscape Journey

**Level Two**

<b>STRAND</b>	<b>OUTCOMES</b>	<b>EARTH QUEST EXHIBITS</b>
Science and Society  Students understand that everybody has ideas about science and that everyone can take part in science. They understand that everyone is affected by science and its applications.	2.2 Students identify some ways scientists think and work.	Core Samples Exploring Earth Fossil Finder
Earth and Beyond  Students understand that easily observable features of the Earth and sky change and that some of these changes are repeated regularly. Students understand that the Earth and sky are resources for their community.	2.1 Students identify and describe changes in the obvious features of the Earth and sky (including changes in the appearance of the moon).	Seasons in a Spin Spinning Sun The Air Up There Turn the Tides What Weather?
	2.2 Students identify and describe short- and longer-term patterns of events (including weather and seasons) that occur on the Earth and sky.	Ozone Seasons in a Spin Swirled World Turn the Tides What Weather?
Life and Living  Students understand that the ability of living things to meet their needs is influenced by their characteristics and their environment. Students understand that particular features can be used to describe how living things change in the course of their life span.	2.1 Students look for patterns and relationships between the features of different living things and how those living things meet their needs.	Food Pyramids Living Cells
	2.3 Students make links between different features of the environment and the specific needs of living things.	Evolution Landscape Journey Plants in Place Urban Jungle

**Level Three**

STRAND	OUTCOMES	EARTH QUEST EXHIBITS
<p>Science and Society</p> <p>Students understand that there are different philosophical and cultural approaches to science, and that people observe and explain phenomena in different ways for different purposes. Students are developing an awareness of the tools scientists use and the impact of the applications of science in society.</p>	<p>3.1 Students make predictions about the immediate impact of some applications of science on their community and environment, and consider possible pollution and public health effects.</p>	<p>Ozone The Air Up There</p>
<p>Earth and Beyond</p> <p>Students understand that there are physical systems on the Earth and beyond it. They understand that changes occur as a result of interactions within systems, and that some of these changes follow predictable patterns. Students understand that living things can use the Earth and sun as resources.</p>	<p>3.1 Students identify and describe some interactions (including weathering and erosion) that occur within systems on Earth and beyond.</p>	<p>Air Pressure Galaxy Gaze Making Mountains Swirled World The Air Up There The Solar System Volcanoes</p>
	<p>3.2 Students discuss regular and irregular events in time and space that occur on the Earth and in the sky.</p>	<p>Earthquakes Ozone Seasons in a Spin Turn the Tides Volcanoes What Weather?</p>
	<p>3.3 Students collect information which describes ways in which living things use the Earth and sun as resources.</p>	<p>Plants in Place</p>
	<p>D3.4 Students explore the relationship between distance and the perceived size of objects</p>	<p>Size of Planets The Solar System</p>
	<p>D3.5 Students explore changes which have occurred to a particular part of the Earth over a particular time scale.</p>	<p>Making Mountains Ozone Tectonic Plates</p>
<p>Energy and Change</p> <p>Students understand the effects of forces on the shape, motion and energy of objects. They are aware that there are different ways to obtain energy.</p>	<p>3.2 Students identify forms of energy (including electrical and sound energy) and describe the effects and characteristics of those forms.</p>	<p>Spinning Sun Turn the Tides</p>

<p>Life and Living</p> <p>Students recognise that the characteristics of different living things are adaptations to different environments. They understand that there are different kinds of living things, each of which produces young of its own kind. They understand that interactions between living things and between living things and environments.</p>	<p>3.1 Students draw conclusions about the relationship between features of living things and the environments in which they live.</p>	<p>Deep Sea Glow Evolution Landscape Journey Living Cells Plants in Place</p>
	<p>3.3 Students describe some interactions (including feeding relationships) between living things and between living things and non-living parts of the environment.</p>	<p>Deep Sea Glow Evolution Food Pyramids Landscape Journey Living Cells Plants in Place</p>

**Level Four**

<b>STRAND</b>	<b>OUTCOMES</b>	<b>EARTH QUEST EXHIBITS</b>
<p>Science and Society</p> <p>Students understand that people of many cultures have contributed to the development of scientific knowledge. They understand what makes a fair test. They appreciate that the uses of science have implications for the community.</p>	<p>4.3</p> <p>Students present analyses of the short- and long-term effects of some of the ways in which science is used.</p>	<p>Ozone</p>
<p>Earth and Beyond</p> <p>Students understand that there are interactions between systems on Earth, in the solar system and in the universe. They understand that events occurring on Earth and those occurring in the universe are on different scales of time and space. Students understand that the Earth and solar system are used differently by different communities.</p>	<p>4.1</p> <p>Students recognise and analyse some interactions (including the weather) between systems of Earth and beyond.</p>	<p>Air Pressure Galaxy Gaze Making Mountains Ozone Seasons in a Spin Size of Planets Spinning Sun Swirled World The Air Up There The Solar System Turn the Tides Volcanoes What Weather?</p>
	<p>D4.4</p> <p>Students use models to demonstrate the relative positions of parts of the solar system</p>	<p>The Solar System Size of Planets</p>
<p>Life and Living</p> <p>Students understand that living things have external and internal structures which enable them to survive and reproduce in their own environment. They understand the types of interaction occurring between living and non-living parts of the environment.</p>	<p>4.1</p> <p>Students examine the internal and external structure of living things.</p>	<p>Deep Sea Glow Food Pyramids Living Plants in Place</p>
	<p>4.3</p> <p>Students evaluate the consequences of interactions between the living and non-living parts of environments.</p>	<p>Evolution Landscape Journey Plants in Place Urban Jungle</p>

## Queensland Years 1-7 SOSE Outcomes for Earth Quest

### Level One

STRAND	OUTCOME	EARTH QUEST EXHIBITS
<p>Systems, Resources and Power</p> <p>Students understand that the environment provides resources that meet our needs and they can conserve familiar resources. They understand how to share resources and to work in a familiar environment and can describe their personal performance in cooperative situations.</p>	<p>STP1.1 Students identify how elements in their environment meet their needs and wants.</p>	<p>All exhibits</p>
<p>Time, Continuity and Change</p> <p>Students understand changes and continuities in people's lives and the environment and can, with assistance, use familiar evidence, They also understand that stories are a source of information and can share personal interpretations about sources.</p>	<p>TCC1.4 Students describe effects of a change over time in a familiar environment.</p> <p>TCC D1.7 Students describe a sequence of objects by age and explain criteria for judgements.</p>	<p>Earthquake Fossil Finder Seasons in a Spin Swirled World Tectonic Plates Turn the Tides Volcanoes</p>
<p>Place and Space</p> <p>Students understand the relationship between themselves and elements of familiar environments and can participate in caring for a place they use. They also understand ways in which information about their local environment can be represented and can reflect on personal actions in a significant place.</p>	<p>PS1.1 Students match relationships between environmental conditions and people's clothes, food, shelter, work and leisure.</p> <p>PS1.2 Students make connections between elements of simple ecosystems.</p> <p>PS1.5 Students describe the relationships between personal actions and environmentally friendly strategies in familiar places.</p>	<p>Core Samples Food Pyramids Landscape Journey Ozone Plants in Place The Air Up There Urban Jungle</p>

**Level Two**

<b>STRAND</b>	<b>OUTCOME</b>	<b>EARTH QUEST EXHIBITS</b>
<p>Time, Continuity and Change</p> <p>Students understand some causes and effects of changes and continuities experienced by individuals, groups and places and can identify some differing interpretations or evidence. They also understand that people have contributed to changes in familiar settings and can analyse the experiences of different generations.</p>	<p>TCC2.1 Students explain different meanings about an event, artefact, story or symbol from different times.</p> <p>TCC2.2 Students record changes and continuities in familiar settings using various devices.</p> <p>TCC2.3 Students cooperatively evaluate how people have contributed to changes in the local environment.</p> <p>TCC2.4 Students describe cause and effect relationships about events in familiar settings.</p>	<p>Earthquake Exploring Earth Fossil Finder Making Mountains Ozone Tectonic Plates Urban Jungle Volcanoes</p>
<p>Place and Space</p> <p>Students understand that changes to particular elements of an environment will affect other elements and can describe how different people, including themselves, value and care for places in different ways. They also understand that familiar and unfamiliar places can be characterised by references to their features and can express preferred futures for a significant place.</p>	<p>PS2.1 Students identify how environments affect lifestyles around Australia.</p> <p>PS2.2 Students predict possible consequences for an ecological system when an element is affected.</p> <p>PS2.4 Students use and make simple maps to describe local and major global features including oceans, continents, and hot and cold zones.</p> <p>PS D2.8 Students describe how their present use of places may change over time to meet their changing needs and interests.</p>	<p>Dig a Hole Food Pyramids Landscape Journey Tectonic Plates What Weather?</p>

**Level Three**

<b>STRAND</b>	<b>OUTCOME</b>	<b>EARTH QUEST EXHIBITS</b>
<p>Systems, Resources and Power</p> <p>Students understand some human interactions with environments, including resource use over time, and can demonstrate occupational interdependence. They also understand the basic principles of democracy and local decision-making processes and can reflect on familiar rules and laws.</p>	<p>SRP3.1 Students make inferences about interactions between people and natural cycles, including the water cycle.</p>	<p>Food Pyramids Seasons in a Spin Swirled World Turn the Tides What Weather?</p>
<p>Place and Space</p> <p>Students understand interrelationships between people and some natural cycles and can participate in identifying and resolving a local environmental issue. They also understand how to use some standard map references about local, national and global places and can identify the values underlying human action in familiar places.</p>	<p>PS3.4 Students use and make maps to identify coastal and land features, countries and climate zones.</p>	<p>Dig a Hole Earthquakes Landscape Journey Making Mountains Tectonic Plates Volcanoes</p>

**Level Four**

<b>STRAND</b>	<b>OUTCOME</b>	<b>EARTH QUEST EXHIBITS</b>
<p>Place and Space</p> <p>Students understand how decisions of resource use and management affect environmental and economic sustainability and can use local field studies to identify how a place is valued and cared for. They also understand how to use a range of maps to analyse global patterns and can consider local and global factors to make decisions about resources.</p>	<p>PS4.1 Students make justifiable links between ecological and economic factors and the production and consumption of a familiar resource.</p> <p>PS4.2 Students predict the impact of changes on environments by comparing evidence.</p> <p>PS4.4 Students use latitude, longitude, compass and scale references and thematic maps to make inferences about global patterns.</p>	<p>Core Samples Dig a Hole Food Pyramids Plants in Place</p>