

Interdependence		
Title	Level*	Science Understandings
<p>Our Bodies Understanding our own bodies and how they work by examining the main systems involved</p>	T	<p>NDS (ACSHE061) Ways in which scientists gather evidence for their ideas and develop explanations UIS (ACSHE062) Science knowledge helps people to understand the effect of their actions</p>
<p>How Do Plants Survive? Plants have both internal and external structures that serve various functions in growth, survival, behaviour, and reproduction. Some plants have adapted to survive in locations that are difficult for living things.</p>	U	<p>BS (ACSSU43) Structural features and adaptations of living things assist their survival BS (ACSSU43) Adaptations of living things for particular environments ESS (ACSSU078) The role of the sun as a provider of energy for the Earth</p>
<p>Yellowstone: A Unique Ecosystem Exploring the interdependence of living things in Yellowstone. What can threaten this ecosystem and why is it so important to preserve it?</p>	U	<p>BS (ACSSU43) Structural features and adaptations of living things assist their survival GS (ACHASSK113) The environmental and human influences on the location and characteristics of a place and the management of spaces within them SS01.3 Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems</p>
<p>Animals and Us People have depended on animals for a long time. Some animals have been changed due to their relationship with people over thousands of years. Animals are used in scientific and medical research.</p>	V	<p>NDS (ACSHE081) Science provides the basis for decision-making in many areas of society and that these decisions can impact on the Earth system UIS (ACSHE083) Scientific knowledge is used to solve problems and inform personal and community decisions</p>
<p>Saving the Amazon River River systems are complex ecosystems. The Amazon, at any one point in time, has the highest amount of water flowing down it. How are scientists measuring changes in this environment and what are people doing to protect it.</p>	V	<p>SS01.1 The biosphere is a dynamic system providing conditions that sustain life on Earth SS01.3 Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems SS01.4 World views recognise the dependence of living things on healthy ecosystems, and value diversity and social justice</p>
<p>The Earth, the Sun and the Moon The sun/Earth/moon all have properties/ locations/ movements that can be observed. The sun provides light/ heat necessary to maintain temperature of Earth. The relationship between sun and Earth is necessary for our survival. Learning more helps us understand how life on Earth is possible.</p>	V	<p>ESS (ACSSU078) The Earth is part of a system of planets orbiting around a star (the sun) ESS (ACSSU078) Identifying the planets of the solar system ESS (ACSSU078) The role of the sun as a provider of energy for the Earth NDS (ACSHE081) How scientists were able to develop ideas about the solar system through the gathering of evidence through space exploration</p>

* Levels indicated by letters are comparable to the Guided Reading Levels of Fountas and Pinnell.

Earth and Human Activity

Title	Level*	Science Understandings
<p>Guiding Lights The history of lighthouses. The technology of the light and construction of towers over the centuries.</p>	T	<p>PS (ACSSU080) Light from a source forms shadows and can be absorbed, reflected and refracted PS (ACSSU080) Uses of mirrors in reflecting light PS (ACSSU080) Refraction of light at the surfaces of different materials DT (ACTDEK022) The impact of the use of materials, components, tools and equipment can be evaluated</p>
<p>Rock Snot, Cane Toads and Other Aliens Invasive species may be plants, animals, fungi, or diseases. The results of introducing a species into an ecosystem where it doesn't belong can bring disaster.</p>	T	<p>BS (ACSSU43) Structural features and adaptations of living things assist their survival SS01.3 Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems</p>
<p>Powerful Ideas: Establishing National Parks The history and facts about some of the world's most famous national parks, and how they were established. The stories of passionate environmentalists John Muir, and Myles and Milo Dunphy, who spent their lives campaigning to protect natural wilderness areas. How they shared their passion for nature and convinced others of the importance of creating national parks and protecting wilderness areas</p>	U	<p>GS (ACHASSK113) The environmental and human influences on the location and characteristics of a place and the management of spaces within them SS01.4 World views recognise the dependence of living things on healthy ecosystems, and value diversity and social justice</p>
<p>Science for the People Sally Ride, astronaut, and Rachael Carson, marine biologist, both achieved success in their field of study and made their scientific ideas accessible and engaging to young people through social media channels.</p>	U	<p>SS01.4 World views recognise the dependence of living things on healthy ecosystems, and value diversity and social justice SS01.5 World views are formed by experiences at personal, local, national and global levels, and are linked to individual and community UIS (ACSHE083) Scientific knowledge is used to predict possible effects of human and other activity and to develop management plans or alternative technologies that minimise these effects</p>
<p>Time Detectives Studying history provides people with knowledge and skills to understand themselves and their world. How aspects of past cultures and societies are preserved. Fossils are important. They reveal secrets of past life. There are a range of evidence and sources of information about past times.</p>	U	<p>ESS (ACSSU075) Rocks and fossils show evidence of changes in Earth's surface features NDS (ACSHE081) Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena and reflects historical and cultural contributions</p>
<p>High Up What is high altitude? How do plants, people, and animals survive and adapt to high altitudes? Case studies provide a snapshot of life in the Himalayas and Andes.</p>	U	<p>BS (ACSSU43) Adaptations of living things for particular environments GS (ACHASSK113) The environmental and human influences on the location and characteristics of a place and the management of spaces within them DT (ACTDEK022) The impact of the use of materials, components, tools and equipment can be evaluated UIS (ACSHE083) How decisions are made to grow particular plants and crops depending on environmental conditions</p>

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Environments

Title	Level*	Science Understandings
<p>Sharing the Environment Human activity has impacted severely on the availability of some animals' habitats. Animals need specific habitats to survive. Living organisms depend on each other and the environment.</p>	T	<p>SS01.2 All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing SS01.8 Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgements based on projected future economic, social and environmental impacts UIS (ACSHE083) Scientific knowledge is used to predict possible effects of human and other activity and to develop management plans or alternative technologies that minimise these effects</p>
<p>The Wandering Albatross Scientists believe that the wandering albatross is one of the most fantastic birds on Earth. How does this bird stay in the air for such long periods of time? How can it stay away from land for so long?</p>	T	<p>BS (ACSSU43) Structural features and adaptations of living things assist their survival SS01.3 Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems SS01.8 Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgements based on projected future economic, social and environmental impacts</p>
<p>Wetlands Wetlands are complex ecosystems. Structures of living things are adapted to their function in specific environments. Human activity has severely impacted the health of wetlands.</p>	U	<p>BS (ACSSU43) Structural features and adaptations of living things assist their survival GS (ACHASSK113) The environmental and human influences on the location and characteristics of a place and the management of spaces within them SS01.8 Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgements based on projected future economic, social and environmental impacts</p>
<p>Climate Change Earth's climate is continually changing. Scientists measure change and predict trends. Global warming is the greatest challenge.</p>	V	<p>ESS (ACSSU078) The role of the sun as a provider of energy for the Earth SS01.8 Designing action for sustainability requires an evaluation of past practices, the assessment of scientific and technological developments, and balanced judgements based on projected future economic, social and environmental impacts NDS (ACSHE081) Science provides the basis for decision-making in many areas of society and that these decisions can impact on the Earth system</p>
<p>Deserts Deserts cover around 20 percent of Earth. They are difficult places to live in. What they all have in common is very little rainfall – less than ten inches per year.</p>	V	<p>BS (ACSSU43) Structural features and adaptations of living things assist their survival BS (ACSSU43) Adaptations of living things for particular environments SS01.7 Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments</p>
<p>How Water Shapes the Land All rainwater runs downhill into rivers and streams. Rivers are the main force in changing the shape of the land. Fresh water is a precious resource and needs to be managed in order to support the needs of a growing global population</p>	V	<p>CS (ACSSU077) Different observable properties and behaviours of solids, liquids and gases UIS (ACSHE083) Scientific knowledge is used to solve problems and inform personal and community decisions</p>

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