

Key Learning Area: Science

CSF Level 1	Activities
<p>Describe, using appropriate language, scientific explorations of the chemical, physical and natural world.</p>	
<ul style="list-style-type: none"> • This is evident when the student is able to: • use appropriate words in describing scientific phenomena • recount what happened in an experiment he or she undertook • use simple statements or drawings to describe his or her observations • identify scientific ideas learned from his or her scientific explorations. 	<p><u>This goes with that Activity</u></p> <p><u>Can Do Cube</u></p> <p><u>Where Do I Live ?</u></p> <p><u>What makes Salt water Salty?</u></p> <p><u>Quirky Questions</u></p> <p><u>Hermit Crab Scramble Group Game</u></p> <p><u>Flotsam and Jetsam</u></p> <p><u>Nocturnal Fun on the Beach</u></p> <p><u>Octopus's Garden</u></p>

CSF Level 2	Activities
<p>Identify simple patterns in observations arising from explorations of readily observable phenomena.</p>	
<p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • make links between aspects of the data collected in scientific explorations • make simple inferences based on observations • identify patterns in data collected from simple experiments and recorded in tables and graphs 	<p><u>This goes with that Activity</u> <u>Can Do Cube</u> Survival: <u>I Need</u> <u>Where Do I Live?</u> <u>What do we need to survive?</u> <u>What makes Salt water Salty?</u> <u>Quirky Questions</u> <u>Hermit Crab Scramble Group Game</u> <u>Flotsam and Jetsam</u> <u>Nocturnal Fun on the Beach</u> <u>Octopus's Garden</u> <u>What is Sand ?</u> <u>Bird Behaviour</u> <u>Tide Pool Vocabulary</u></p>

CSF Level 3 Earth and Space Science Outcomes 3.1	Activities
<p>The student is able to describe how features of the landscape are altered by the processes of weathering and erosion</p> <p>This evident when the student can</p> <ul style="list-style-type: none"> • Distinguish between the terms weathering and erosion • State the kinds of visible changes in the environment caused by the processes of weathering and erosion • Identify landscapes in the environment that have been affected by weathering and erosion • Suggest ways to reduce or avoid the effects of weathering and erosion 	<p><u>How the Bluff Got its face?</u></p> <p><u>Rocky Platforms</u></p> <p><u>Wave Experiments</u></p> <p><u>What is Sand ?</u></p>

CSF Level 3 Biology <i>Living together: past, present and future</i> Outcomes 3.1	Activities
<p>Describe environmental factors that affect the survival of living things.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • State conditions in the environment necessary for survival of living things. • Distinguish between living (biotic) and non-living (abiotic) factors which affect the survival of living things. • Relate the need to reproduce to the survival of kinds of living things. 	<p><u>Hermit Crab Scramble Group Game</u></p> <p><u>Quirky Questions</u></p> <p><u>Nocturnal Fun on the Beach</u></p> <p><u>Octopus's Garden</u></p> <p><u>Where Do I Live?</u></p> <p><u>What do we need to survive?</u></p> <p><u>Rock Pool Group Game</u></p> <p><u>Rock Pool Group Game - spreadsheet</u></p> <p><u>I will survive</u></p> <p><u>Too Many Feet</u></p> <p><u>Leave it on the Beach</u></p> <p><u>Fishing</u></p> <p><u>What's the Difference?</u></p> <p><u>Commercial Mollusc Fisheries</u></p> <p><u>Food Chain Cut and Paste</u></p> <p><u>What makes Salt water Salty?</u></p>

CSF Level 3 Biology <i>Structure and Function</i>	Activities
<p>Identify the main structural features that work together to form systems in plants and animals.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • state the importance of particular systems to plants and animals • identify the main role of each system studied • recognise that parts of a system have a common function • identify the position and names of main parts of a system. 	<p><u>Bird Behaviour</u></p> <p><u>Tide Pool Vocabulary</u></p> <p><u>This goes with that</u></p> <p><u>Algae Pressings</u></p>

CSF Level 4 Biology <i>Structure and Function</i> Outcomes 4.2	Activities
<p>Describe how selected systems of plants and animals function.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • describe the features of the main parts of plant systems, that help them carry out their functions • explain how particular systems of plants and animals carry out their function • describe the features of the main parts of animal systems, that help them carry out their functions 	<p><u>Algae Pressings</u></p> <p><u>Creature Features</u></p>

CSF Level 4 Biology <i>Living Together Past Present and Future</i> Outcomes 4.1	Activities
<p>Identify relationships between living things which help them survive in their habitat.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • Draw simple food chains. • Relate feeding relationships, for example, predator/prey and producer/consumer, to survival. • Relate survival of animals and plants to their dependence on each other in a variety of ways. • Identify interdependent relationships within a group of animals. 	<p><u>Hermit Crab Scramble Group Game</u></p> <p><u>Quirky Questions</u></p> <p><u>Flotsam and Jetsam</u></p> <p><u>Nocturnal Fun on the Beach</u></p> <p><u>Octopus's Garden</u></p> <p><u>Ocean Food Chain Cut and Paste</u></p> <p><u>Food Chain cut and Paste</u></p> <p><u>Friend Foe Competitors</u></p> <p><u>Multiple Personalities</u></p> <p><u>Feeders Summary</u></p> <p><u>Food consumers worksheet</u></p> <p><u>Ecosystems Cloze</u></p> <p><u>Food pyramid worksheet</u></p> <p><u>Rocky Platforms</u></p> <p><u>Crab Surveys</u></p> <p><u>Field Methods</u></p> <p><u>Sand Dune Ecosystems</u></p> <p><u>Future Thinking about Beaches</u></p> <p><u>Litter Trap</u></p> <p><u>Seaweed Issues</u></p> <p><u>Too Many Feet</u></p> <p><u>Leave it on the Beach</u></p> <p><u>Fishing</u></p> <p><u>I will survive</u></p> <p><u>Rock Pool Group Game</u></p> <p><u>Rock Pool Group Game - spreadsheet</u></p>

<p>CSF Level 5 Biology <i>Living Together Past Present and Future</i> Outcomes 5.1</p>	<p>Activities</p>
<p>Explain the biological basis of classification of organisms into major groups.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • Identify patterns of similarities and differences between a range of living things. • Define the major characteristics used in the 5-Kingdom system of classification. • Explain why particular sets of features, for example, color, movement and structural features, are useful or not useful, to sort organisms using dichotomous keys 	<p><u>Shell Classification</u></p> <p><u>Seagrasses are special</u></p> <p><u>Algae Pressings</u></p>

<p>CSF Level 5 Earth and Space Sciences <i>Our Place in Space</i> Outmes 5.3</p>	<p>Activities</p>
<p>Describe how the positions of the planets, Moon, Sun and stars affect natural phenomena.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • Describe how the tides are affected by the positions of the Earth, Moon and Sun. 	<p><u>Rocky Platforms</u></p> <p><u>Boulders</u></p> <p><u>Do sand dunes really form a barrier?</u></p> <p><u>The Sand Dune Ecosystem</u></p> <p><u>Beach Water Cliffs</u></p>

CSF Level 5 Biology <i>Living Together Past Present and Future</i> Outcomes 5.2	Activities
<p>Describe interactions between living things and between living things and their non-living surroundings.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> Describe different interactions in an ecosystem, including competition, predation, collaboration, parasitism, pollination, reproduction and parenting. Construct a food web of organisms in an ecosystem. Show graphically relationships between members of food chains, including a parasite-host relationship and producer-consumer relationships. Describe the effect of changes in the environment on interactions in an ecosystem. 	<p> <u>Rock Pool Power Point</u> <u>Friend Foe Competitor</u> <u>Multiple Personalities</u> <u>Feeders Summary</u> <u>Ecosystems Cloze</u> <u>Food pyramid worksheet</u> <u>What is Sand ?</u> <u>What's the Difference?</u> <u>Commercial Mollusc Fisheries</u> <u>Things that live in Sand</u> <u>Crab Surveys</u> <u>Field Methods</u> </p> <p> <u>Food Web cut and paste</u> <u>Micro Habitat Jigsaw activity</u> <u>Macro Habitat Jigsaw activity</u> </p> <p> <u>Blooms Living in Water</u> <u>Food Consumers Worksheet</u> <u>Food Pyramids</u> </p> <p> <u>Seaweed Issues</u> <u>Biotic Factors Cube</u> <u>Abiotic Factors Cube</u> <u>Quirky Questions</u> <u>Too Many Feet</u> <u>Leave it on the Beach</u> <u>Fishing</u> <u>Hermit Crab Scramble Group Game</u> <u>Future Thinking about Beaches</u> <u>Litter Trap</u> <u>Red Algae Bloom</u> </p>

CSF Level 5 Biology <i>Structure and Function</i> Outcomes 5.3	Activities
<p>Relate the structure and organisation of different cells to their function.</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • identify major structural components of cells as viewed at light microscope level • determine the function of cells from their observable features • describe organisational relationships between organs, tissues, cells and systems. 	<p><u>Creature Features</u> <u>What's the Difference?</u> <u>This goes with that Activity</u> <u>Can Do Cube</u> <u>Where Do I Live ?</u> <u>What makes Salt water Salty?</u> <u>Quirky Questions</u> <u>Hermit Crab Scramble Group Game</u> <u>Nocturnal Fun on the Beach</u></p>

CSF Level 5 Biology <i>Structure and Function</i> Outcomes 5.4	Activities
<p>Explain how plants and animals obtain, transport and use nutrients. This is evident when the student is able to:</p> <ul style="list-style-type: none"> • describe the mechanical and chemical processes of digestion • describe the role of the circulatory system in transporting the products of digestion to cells • illustrate the pathway taken by water and minerals from the soil to the leaves of a flowering plant • identify the categories of inorganic and organic nutrients required by plants and animals and the uses to which they are put. 	

CSF Level 6 Biology	Activities
<p>Explain cellular processes, including photosynthesis and respiration</p> <p>This is evident when the student is able to:</p> <ul style="list-style-type: none"> • Determine which factors affect photosynthesis • Describe cellular respiration, including a comparison of the energy outputs of aerobic and anaerobic cellular respiration • Compare photosynthesis and respiration 	<p><u>Things that live in Sand</u> <u>Diversity Indices as an educational tool</u></p>