



<b>Date</b>	<b>Class Level</b> Fifth and Six (also suitable for younger students)	<b>Subject</b> Science
<b>Strand</b> Living Things		<b>Strand Unit</b> Plants and Animals
<b>Title</b> Seashore exploration / guided tour		
<b>Objective(s)</b> Conduct a fieldtrip to the seashore exploring the plants and animal life. Working scientifically the children will learn about the variety and characteristics of living things and processes of life typically found on the seashore.		
<b>Skills Required</b> The children will have developed their scientific skills including questioning, observing, predicting, investigating, estimating and measuring, analysing, as well as recording and communicating		
<p><b>Learning Objectives</b></p> <p>This lesson plan provides suggestions for seashore exploration. It is not prescriptive and should be used as a guide.</p> <p>By carrying out a seashore exploration the child should be enabled to do a number of the following:</p> <ul style="list-style-type: none"> <li>• Become aware of some of the basic life processes in animals and plants on the seashore.</li> <li>• Identify the interrelationships and interdependence between plants and animals on the seashore.</li> <li>• Observe and explore some ways in which plant and animal behaviour is influenced by, or adapted to, environmental conditions on the seashore.</li> <li>• Group and compare living things into sets according to their similarities and differences.</li> <li>• Become familiar with the characteristics of some major groups of living things.</li> </ul>	<p><b>Learning Activities</b></p> <p><b>Preparation:</b></p> <p>Review some of the Explorer materials and presentations to help familiarising yourself with typical animals that you will find on the seashore. Relate these back to your own experiences of exploration as a child.</p> <p>Complete a recce of the seashore a couple of days prior to familiarise yourself with the seashore that you are visiting – e.g. habitats, animals and seaweeds</p> <p>Brief guides assisting – get assistance from parents and other teachers to work in teams on the shore.</p> <p>Always check the tide to see when it is coming in / going out. Remember to allow for as much time as possible on the shore; try to explore the zones as the tide is going out. Start an hour before the tide is going out so you can work your way down with the tide.</p> <p><b>Talk and Discussion:</b></p> <p><b>1. Safety / conservation codes</b></p> <p>Start off the fieldtrip by getting the students to recall the safety and conservation code.</p> <p>Split class into teams with a team leader / guide and remind everyone what to do in the event of an emergency.</p>	



Give equipment and seashore guides to each team leader. Let the children be hands free so they can explore. Set teams off in different directions down the shore (pending tide which direction you start and finish at). Allow at least an hour for exploration.

## **2. Before you set off exploring**

Give an overall introduction of the seashore that you are visiting:

- What type of seashore is it? Discuss with the students whether it is a rocky or sandy shore.
- How the seashore is divided into zones. Discuss and get the students to observe where they think the splash zone, upper, middle, lower and sub-tidal zones are.
- What structures can they see that are not natural.
- What sounds do they hear (prompt: seagulls, waves, wind, cars etc). What do they smell (prompt: salt air, flowers, grass etc)

## **3. Focus the children straight away**

Set the tone for the exploration from the start. Involve the students in exploring, questioning, observing and analysing features of the seashore habitat, plant and animal life in each zone. Remember to slow down and observe – what do they see? What can they find? Look under the seaweeds, small rocks.

## **4. Look and experience first and talk later - Teach less and share more**

Get the children involved in obtaining direct experience. Find and observe the animals they find on rocks or gently put animals (such as crabs or fish) in the team bucket. Discuss and provide observations and stories about the animals that you and the children discover. (Share your own ideas and seek the child within. Children will respond to anecdotes and stories of 'survival, extreme conditions, carnivores on the seashore etc' more freely than text book explanations).

*Useful tip: Select up to 5 animals and seaweeds that you can confidently tell stories about from the upper shore to the lower shoreline that you can find – see 'Explorers species information book' and 'Anecdotes*



*about seashore animals' as a guide.*

### **5. Be receptive and enthusiastic**

Remember to listen and be aware of children's spontaneous enthusiasm and direct towards learning.

Adapt to your surroundings and be alert to new discoveries the children are making.

Your enthusiasm will be contagious and will help you and your children become fellow adventurers.

Treat the seashore as the "star" and encourage the students to explore, question, observe and analyse. Don't be afraid of difficult questions – particularly if you don't know the names of the animals or seaweeds.

Get the students to make up a name until you find out the 'scientific or common name'. Explain how new species discovered in the ocean are often named after the scientist that found them. "So "today we will call it a [name of student .....]"

Alternatively: Have a simple pocket guide to help answer questions. Work with the students to work out the answers using the guidebooks.

*'A beginners guide to Ireland's Seashore'* published by Sherkin Island Marine Station, provides excellent explanations about animals and seaweeds and also include the Irish names of many of the species.

Take a camera / camera phone to document animals that you may not be familiar with and are not listed in the species guides. Treat it as part of a lesson extension - when you are back in the class see who can find the animal first by looking up guides or the internet.

### **Resources**

#### **Prior to going to the seashore review:**

- Explorers Introduction to Seaweed Presentation.
- The Explorers seashore ecology PowerPoint presentation
- Living things – simple presentation
- Seashore animals sorting and classifying presentation



	<ul style="list-style-type: none"> <li>• Planning a trip to the seashore check list</li> <li>• Safety on the seashore and conservation code quiz</li> <li>• Explaining the tides to children presentation</li> </ul> <p><b>On the Seashore:</b> <b>For each team:</b></p> <ul style="list-style-type: none"> <li>• Equipment: White bucket, small net, handheld microscope (attach with a bright coloured ribbon for hanging around your neck)</li> <li>• Pocket guide</li> <li>• Camera phone</li> <li>• Whistle</li> </ul>
<p><b>Differentiation</b> Differentiate group activities and roles to account of individual needs, by support, task. Mixed ability pairing.</p>	
<p><b>Assessment</b> Students: KWL chart (What I know, What I want to know, What I learned) Examine learning outcomes before and after e.g. knowledge, understanding, skills. Evaluation: Reflect on learning experiences that lead to the outcomes e.g. attitudes, enjoyment, as well as motivation to learn about the subject.</p>	
<p><b>Linkage and Integration</b> Geography: Natural Environments – the local natural environment, caring for my locality Maths: Data collection – representing and interpreting data, measures etc. PE: Games, Outdoor and adventure activities English: Writing, Oral language – emotional and imaginative development through language Gaeilge: Listening, speaking, reading and writing History: History of seaweed in Ireland Music: Listening and responding, performing Visual Art: Drawing, paint and colour, construction, fabric and fibre</p>	