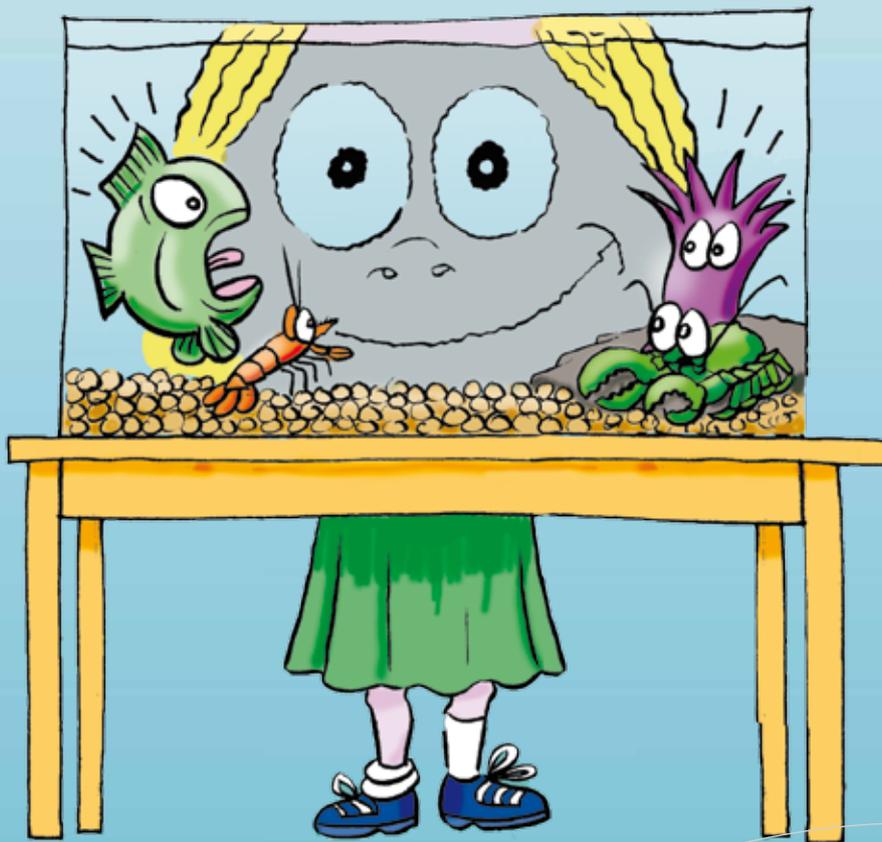


EXPLORERS EDUCATION PROGRAMME™

EXPLORERS PLANNING GUIDE FOR PRIMARY SCHOOL TEACHERS

EXPLORERS AQUARIUM IN CLASSROOM BOOKLET

**TEACHERS PRESENTATIONS
CROSS CURRICULAR LESSON PLANS
AND ACTIVITIES**



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INTRODUCTION

Ireland is an island with a seabed territory of approximately 880,000 km². Ireland's coastline is approximately 7500km long. The oceans, seas and shorelines around Ireland therefore present many opportunities to introduce cross-curricular lessons and activities for students of all age groups.

EXPLORERS SALTWATER AQUARIUM

Creating a seashore "experience" using the Explorers aquarium is an exciting way of bringing the sea to life in the classroom. The Explorers saltwater aquarium is provided by an Explorers centre with native Irish species that are typically found on the Irish seashore. The seashore animals supplied have been especially selected to reduce the risk of any potential issues for the animals.

This booklet also provides you with a range of templates where the students can log information about the aquarium.

Please see the Explorers Aquarium Best Practice Guidelines within this booklet for more information about keeping a saltwater aquarium in class. This module is recommended for 5th and 6th class.

EXPLORER LESSON PLANS AND MATERIALS

Explorer lesson plans and activities have been developed to support teaching students about our oceans, seashores and Ireland's marine resource.

Subjects covered include: Science, Geography, English and Gaeilge, Art, Mathematics, and History.

See the following teachers' guide for suitable lessons that can be used with the aquarium. These are available to freely download from www.explorers.ie.

Additional resources including: The Explorers Activity Book; The Real Map of Ireland poster and activity sheet; as well as the Our Ocean - The Real Map of Ireland workbook are available to download.

TEACHERS' RESOURCES

Teachers' resources including class presentations, information books and illustrations about the seashore, Ireland's marine territory and the Real Map of Ireland are available to download from www.explorers.ie.

CERTIFICATE OF PARTICIPATION

On completion of this module, the class and students will be awarded an Explorers Certificate of Participation.





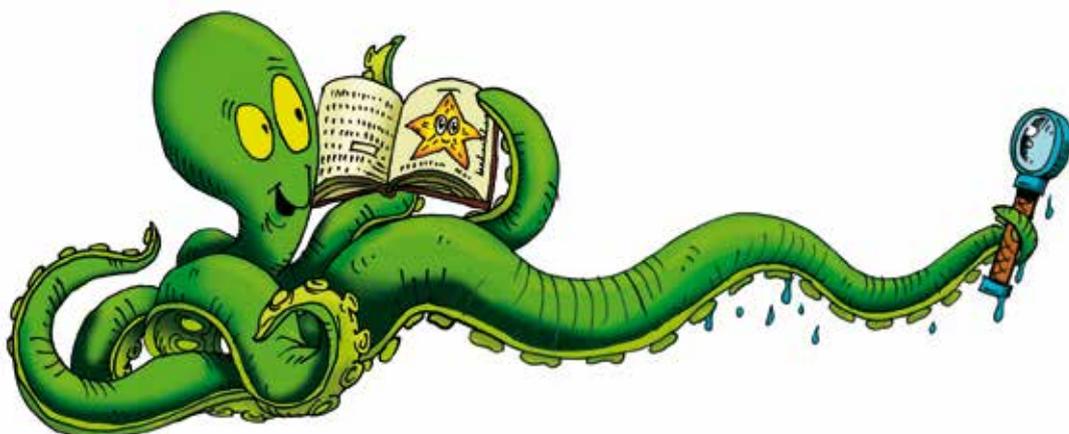
EXPLORERS EDUCATION PROGRAMME™ MISSION STATEMENT AND GOALS

OUR MISSION STATEMENT

The Explorers Education Programme™ aims to build on Ireland's marine and maritime heritage by increasing awareness of the value, opportunities and social benefits of our ocean wealth and identity.

OUR GOALS

- 1. Educate** school children, teachers and educators in Ireland, enabling them to understand the oceans influence on us and our influence on the ocean, through outreach and centre activities in Ireland.
- 2. Coordinate** professional development training and workshops for teachers and trainee teachers, to develop their marine literacy skills and promote the use of marine content in line with the national curriculum.
- 3. Develop** education materials and resources based on the Irish school curriculum to support teachers teaching marine subjects in schools.
- 4. Promote** ocean literacy and marine outreach activities with local communities, educators and influencers so as to create dialogue and engagement about our ocean.



OCEAN LITERACY PRINCIPLES AND FUNDAMENTAL CONCEPTS

OCEAN LITERACY

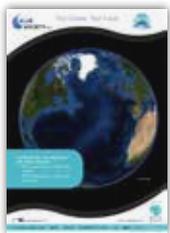
Ocean Literacy means 'understanding the ocean's influence on you and your influence on the ocean'. An ocean literate person:

- understands the essential principles and fundamental concepts about the ocean;
- can communicate about the ocean in a meaningful way; and
- is able to make informed and responsible decisions regarding the ocean and its resources.

OCEAN LITERACY PRINCIPLES AND POSTERS

Seven ocean literacy principles and concepts about the ocean have been developed by scientists and educators to help provide consistency and coherence when learning about the ocean.*

'Your Ocean – Your Future' posters highlight the ocean principles and concepts as well as the Blue Society's (www.bluesociety.org) vision where people benefit from the ocean while preserving its environment. The seven ocean principles and a selection of the ocean concepts are listed below. These may be introduced in the class to help raise awareness about the ocean's influence on the students and highlight their influence on the ocean. Your Ocean – Your Future posters are available to download from the Other Resources section at www.explorers.ie.



1. **The Earth has one big ocean with many features**

- The ocean covers 70% of the Planet.
- 97% of the Earth's water is in the ocean.



2. **Ocean, life and activity under the sea shape the features of the Earth**

- Tectonic activity and climatic changes have shaped continental shelves under the ocean, as well as forming islands and land features above.
- The changing sea levels and the force of the waves continuously affect our coast lines.



3. **The ocean is a major influence on our weather and climate**

- The ocean drives the water cycle, which supplies us with fresh water.
- The ocean moderates the weather and the Earth's climate.



4. **The ocean made Earth habitable**

- Over 50% of the oxygen we breathe comes from phytoplankton in the ocean.
- The ocean absorbs 30% carbon dioxide added to the atmosphere by human activity.



5. The ocean supports a great diversity of life and ecosystems

- More plants and animal life are found in the ocean than on land.
- Ocean life ranges from the smallest microscopic plants and animals (phytoplankton and zooplankton), to the largest animals on earth, such as blue whales.
- Seashores, estuaries and the deepest parts of the ocean provide important nursery grounds for marine and aquatic species.



6a. The ocean and humans are inextricably interconnected - Food

- The ocean provides an essential source of food.
- The ocean provides minerals, medicine and energy resources that improve our quality of life.



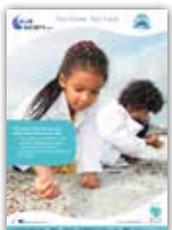
6b. The ocean and humans are inextricably interconnected – Trade

- More than 90% of global trade is carried by sea.



6c. The ocean and humans are inextricably interconnected – Energy

- E.U. offshore wind investments topped €4.2 billion in 2014



6d. The ocean and humans are inextricably interconnected – Heritage and Culture

- The ocean contributes to our marine heritage and culture.
- The majority of Ireland's population lives within 50km of the coast.



7. The ocean is largely unexplored

- New technologies, sensors and tools are expanding the ability to explore the ocean.
- Ireland has one of the largest marine territories in Europe.

**The ocean literacy principles were first developed in the by an ocean literacy framework in the USA and are now being adopted by the EU. For further information see: Ocean Literacy: The Essential Principles and Fundamental Concepts of Ocean Sciences for Learners of All Ages, Version 2 : March 2013. Retrieved from: <http://www.coexploration.org/oceanliteracy/documents/OceanLitChart.pdf>*



EXPLORERS AQUARIUM BEST PRACTICE GUIDELINES

The Explorers saltwater aquarium is provided with native Irish species that are typically found on the Irish seashore. The seashore animals supplied have been especially selected to reduce the risk of any potential issues for the animals.

Once the Explorers Aquarium has been set up in your classroom with a selection of animals from the seashore, discuss the best practice guidelines with the students to ensure the animals are kept healthy.



THE ANIMALS

The seashore animals supplied by the Explorers education officer have been especially selected to reduce the risk of any potential issues with the species.

It is important not to overstock the aquarium, as small tanks can only cope with a small quantity of animals.

If you are looking at restocking your aquarium, discuss the options with your education officer. Seashore animals should not be taken from their natural environment for long periods of time and must be returned to their natural environment.



AVOID ADDING CERTAIN ANIMALS AND PLANTS TO THE AQUARIUM

- Shellfish can contaminate the water if they die. Please avoid adding them to the aquarium.
- Shore crabs tend to bully other animals and can result in a lot of fish going missing!
- Seaweed can die or rot in the aquarium, taking up all of the oxygen.



MONITOR AND MAINTAIN YOUR AQUARIUM EVERY DAY

To maintain a healthy tank, the animals need good quality clean **saltwater**.

Remember to go through your **daily** and **weekly** check list of tasks to ensure the animals are healthy and happy.

Remember not to position the tank near the sun or a heater as this can overheat the tank reducing the oxygen in the water. Remember to check the water temperature daily.



FEEDING YOUR ANIMALS

Do not overfeed your animals. Food not eaten in the tank will contaminate the water and reduce the oxygen for the animals to breath. If the water is cloudy or "scum" builds up on the rocks, clean saltwater may need to be added. Please check with the Explorers education officer.



DON'T BANG THE AQUARIUM

It is very important not to tap or bang the glass of the aquarium as this can cause stress to the animals.



OUR EXPLORERS AQUARIUM AND SEASHORE ANIMALS

Your Explorers Aquarium has arrived with the seashore animals! Using the table below, complete the information about the Explorers saltwater aquarium and the animals.

DATE OUR SEASHORE ANIMALS ARRIVED:	
OUR EXPLORERS AQUARIUM:	
How big is our tank (height, width, length)?	
What volume of water does the tank hold?	
When setting up the tank, what material is put in the bottom of the tank?	
Explain why it is important to have sand and rocks in the aquarium? (e.g. natural filtration and a hiding place for animals)	
What other type of air/filtration is used on your tank?	
Why is this important?	
OUR SEASHORE ANIMALS INCLUDE:	
VERTEBRATES: Animals with a backbone e.g. fish	INVERTEBRATES: Animals without a backbone e.g. anemone, prawn etc



CARING FOR OUR EXPLORERS AQUARIUM

DAILY JOBS:

MAINTENANCE

Check the lights are working. Turn the aquarium light on (in the morning) and off (in the afternoon).

Check the filter and air pump are working.

Clean outside the Aquarium with a clean dry cloth.

Clean build-up of residue or salt around the lid of the aquarium with a clean dry cloth.

Record any out-of-the-ordinary events e.g. malfunctioning piece of equipment.

ANIMALS

Roll call - check all animals are present.

Monitor and record the condition of animals.

Remember to note any unusual occurrences in the aquarium. Observe any changes in behavior of the animals, such as, symptoms of illnesses, aggressiveness, what the fish are (or are not) eating. Even check their sizes from time to time to see if they have increased in size.

WATER QUALITY

Record the temperature of the water. The temperature should not be warmer than 16°C. It is important to ensure that the water is cool as it is difficult for the animals to breath in warm water, as there is less oxygen.

Monitor the quality of the water. Keep an eye on the colour and clarity of the water for water quality. Additional clean saltwater may need to be added if water becomes too salty or dirty. Contact your explorers education officer if extra water is required. Remember not to over feed the animals as uneaten food will sink to the bottom of the aquarium and form "scum" on the rocks. Dirty water means less oxygen for the animals to breath.

OTHER EVENTS

Record any unusual events. Power outages, heat waves, cold spells, and other events that may not have an immediate effect on the animals or the equipment. Changes may take effect in the aquarium a few days or weeks later, and can therefore be traced back through your records. Even guests visiting your aquarium can cause changes in the activity of the animals in the aquarium or the feeding schedule.

WEEKLY JOBS:

ANIMALS

Feed the animals 3 x a week 2.5ml (teaspoon) of the food provided. The teacher should observe and ensure the measurements are correct.

Create a table for children to sign their name and record the jobs have been completed.

Use the 'Caring for Our Explorers Aquarium Checklist' to monitor the care of your animals and aquarium.

RECORD THE AQUARIUM'S WATER TEMPERATURE

Record the temperature of the water in the aquarium every day. The temperature should not be warmer than 16°C. If the temperature is above 16°C, add a cool pack placed inside a sealed freezer bag to bring the temperature down. If possible record the room temperature daily in a different colour on this table. This information can be used to compare the temperature of your classroom and your aquarium. See the mathematics lesson plan 'Recording the Temperature of the Saltwater Aquarium' for more information. You can record your daily temperatures in the table below. There is space allocated for your classroom temperature and aquarium temperature should you wish to compare them.

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1					
2					
3					
4					



RECOMMENDED PLANS

The following schedule provides a list of recommended presentations and lesson plans that can be conducted prior to Explorer aquariums being placed in the classroom, as well as for the duration the aquarium is in class.

Further information and links for downloading the lesson plans are available in the Teachers Resources and Lesson Plans section of this booklet. All of the materials are freely available to download from www.explorers.ie. A number of the lesson plans are also available in Irish and can be downloaded from the Gaeilge section of the website.

PRESENTATION / LESSON PLAN SCHEDULE		ESTIMATED TIME ALLOCATION FOR CLASS ACTIVITY
EXPLORERS TEACHERS PRESENTATIONS AND RESOURCES		
Science	Living Things - simple PowerPoint presentation	The presentations can be used as an introduction to lesson plans across all subjects. Therefore teachers may shorten or expand the presentations as required.
	The Explorers Seashore Ecology - PowerPoint presentation	
	Seashore Animals Sorting and Classifying - PowerPoint presentation	
	Explorers Species Information Book - Guide	
Geography	Ireland's Marine Resource - What would I do with the Real Map of Ireland? - PowerPoint presentation	
EXPLORERS LESSON PLANS		
Evaluation	Mind mapping	20 minutes
All	Caring for our explorers aquarium	Daily: 10 – 15 minutes
Science	Plant and animal life on the seashore - creating a seashore, species and seaweed guide	40 minutes
Mathematics	Recording the temperature of the saltwater aquarium	40 minutes
Geography	What would I do with my local seashore	40 minutes
Geography	Learn about an oceanographer that works in the local community	40 minutes – 2 hours
English	Explorers aquarium – creative writing book	40 minutes – 2 hours
English	Writing a newsletter	2 hours
English	Writing poetry about Ireland's seashore and oceans	2 hours
History	Who is John Phillip Holland and what boats sink and float?	40 minutes
Visual Arts	Drawing still life scenes of items from the seashore	50 minutes
Visual Arts	Save the seas poster	40 minutes
Evaluation	Evaluation and discussion – Aquariums in Class	40 minutes



TEACHERS RESOURCES AND LESSON PLANS

TEACHERS RESOURCES

GUIDE TO SETTING UP A FISH TANK / FISH TANK PROBLEM SOLVING AND TROUBLE SHOOTING

The Guide to Setting Up A Fish Tank provides instructions to setup your own aquarium in the classroom. It also provides some useful tips about the maintaining your tank.

The Fish Tank Problem Solving and Trouble Shooting guideline provides 'questions and answers' to assist you with common problems that may occur while keeping saltwater aquariums in the classroom.

Both of these documents can be found in the Frequently Asked Questions on the Explorers Website www.explorers.ie

LIVING THINGS – SIMPLE PRESENTATION

The Living Things - Simple Presentation provides a range of slides that can be used to introduce the students to the common species found on the Irish seashore. This presentation can be used to help your students learn about the animals that they will have in their aquarium.

EXPLORERS SEASHORE ECOLOGY - POWERPOINT PRESENTATION

The Explorers Seashore Ecology Presentation provides a range of slides that can be used to introduce the students to the common species and plants found on the Irish seashore. The presentation also provides illustrations of the seashore zones, tides, as well as information on organising a seashore safari.

SEASHORE ANIMALS SORTING AND CLASSIFYING PRESENTATION

The Seashore Animals Sorting and Classifying Presentation provides a range of slides that can be used on an interactive board. Students can learn about sorting and classifying different species.

EXPLORERS SPECIES INFORMATION BOOK

The Explorers Species Information Book provides the common English and Irish names of many of the species found on the seashore. Images of the species are included highlighting key information about what the animals eat, their habitat as well as what size they grow to.

ANECDOTES ABOUT SEASHORE ANIMALS GUIDE

Anecdotes about Seashore Animals is a useful and fun guide that can be used when explaining the life stories of the different animals.

IRELAND'S MARINE RESOURCE - WHAT WOULD I DO WITH THE REAL MAP OF IRELAND ?

Ireland's marine resource - What would I do with the Real Map of Ireland? Presentation provides illustrations to help students think about the size of Ireland's marine territory as well as coming up with ideas of what our marine resource can be used for. Learning about Ireland's marine resource can be used to support geography lesson plans relating to human environments, natural environments and environmental care.

YOUR OCEAN - YOUR FUTURE POSTERS

Ten posters highlighting the ocean literacy principles and concepts provide inspiration for teaching students about the ocean. The posters can be used with a range of lesson plans highlighting each principle and concept.

The posters are available to download from the **Other Resources** at www.explorers.ie


SCIENCE
Title: PLANT AND ANIMAL LIFE ON THE SEASHORE - CREATING A SEASHORE, SPECIES AND SEAWEED GUIDE
<http://oar.marine.ie/handle/10793/1101>
Strand:
Living Things

Strand Unit:
Plants and Animals

OBJECTIVE(S)

The children will create a Seashore Species and Seaweed Guide. The lesson plan includes a series of activities for in the classroom including completing drawings and illustrations from observation. The children will also write about the seashore animals and plants demonstrating their understanding of the animals, habitats and the zones where the animals and seaweeds are typically found.

SKILLS

Working scientifically by • Questioning • Observing • Investigating • Estimating and measuring
Analysing by sorting and classifying, recognising patterns, and interpreting • Recording and communicating.
Drawing using • Line • Shape • Form • Colour and tone • Texture • Pattern and rhythm • Space.

Title: DENSITY EXPERIMENT - WHAT FLOATS AND SINKS ... AND WHY?
<http://oar.marine.ie/handle/10793/938>
Strand:
Energy and Forces

Strand Unit:
Forces

OBJECTIVE(S)

The aim of the lesson plan is for the children to investigate floating and sinking with a range of materials and objects. The students should make and test predictions about objects that will sink or float and group objects based on these criteria. The students will also develop an understanding of density and how fish swim in the ocean.

SKILLS

Working scientifically by • Questioning • Observing • Investigating • Estimating and measuring
Analysing by sorting and classifying, recognising patterns, and interpreting • Recording and communicating.
Drawing using • Line • Shape • Form • Colour and tone • Texture • Pattern and rhythm • Space.

Title: OCEANS ALL AROUND US – DEMONSTRATING A MINITURE WATER CYCLE

<http://oar.marine.ie/handle/10793/940>

Strand:
Environmental Awareness and Care

Strand Unit:
Science and the Environment

OBJECTIVE(S)

The students will learn about the importance of the water cycle and foster an appreciation of the ways in which people use the earth's resources. Students will examine the individual, community and national responsibility for environmental care.

Students will develop simple understanding of some atmospheric features through exploration of how the water cycle works. They will identify different marine features and become familiar with the relationship of these features to each other and the lives of plants, animals and humans.

SKILLS

Working scientifically by • Questioning • Observing • Predicting • Investigating and experimenting • Recording and communicating.

Title: WATER POLLUTION

<http://oar.marine.ie/handle/10793/941>

Strand:
Environmental Awareness and Care

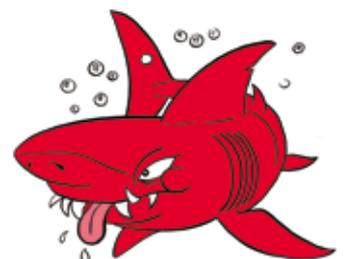
Strand Unit:
Environmental Awareness

OBJECTIVE(S)

The students will learn about what causes water pollution and how to be environmentally aware. *Note: Students should understand the concept of the water cycle before moving onto water pollution (see Lesson Plan "Oceans all Around Us").

SKILLS

Working scientifically by • Questioning • Observing • Investigating • Estimating and measuring
Analysing by sorting and classifying, recognising patterns, and interpreting • Recording and communicating.
Drawing using • Line • Shape • Form • Colour and tone • Texture • Pattern and rhythm • Space.





GEOGRAPHY

Title: WHAT I WOULD DO WITH MY LOCAL SEASHORE

<http://oar.marine.ie/handle/10793/1051>

Strand:
Human Environments

Strand Unit:
Living in the local community

OBJECTIVE(S)

The aim of the lesson plan is for children to identify the beach as a place where people go to enjoy fun activities. Through project work, students will create a postcard campaign to raise awareness and suggest ways that the beach could be kept clean and safe.

SKILLS

Developing a sense of • Place • Space • Using pictures, maps and globes.
Developing geographical investigation skills by • Observing • Investigating and experimenting
Recording and communicating.

Title: LEARN ABOUT AN OCEANOGRAPHER THAT WORKS IN THE LOCAL COMMUNITY

<http://oar.marine.ie/handle/10793/1042>

Strand:
Human Environments

Strand Unit:
People Living and Working in the Local area

OBJECTIVE(S)

The aim of the lesson plan is for children to investigate the work of people in a range of locations in locality. The students will become familiar with the range of different work oceanographers do.
*Note: This lesson plan may be adapted to suit an older age group. Teachers may also wish to adapt the lesson plan, so students can investigate a range of marine careers. A guest speaker may be invited to the class to talk about their work.

SKILLS

Developing a sense of • Place • Space • Using pictures, maps and globes.
Developing geographical investigation skills by • Investigating • Recording and communicating.

Title: WHAT WOULD I DO WITH IRELAND'S MARINE TERRITORY<http://oar.marine.ie/handle/10793/1050>**Strand:**
Natural environments**Strand Unit:**
Local natural environment**OBJECTIVE(S)**

The students will develop an understanding of the size of Ireland's marine territory and the map that is commonly known as 'The Real Map of Ireland'. The students will learn to identify Ireland's oceans and seas. They will also develop an understanding of the importance of working in the marine.

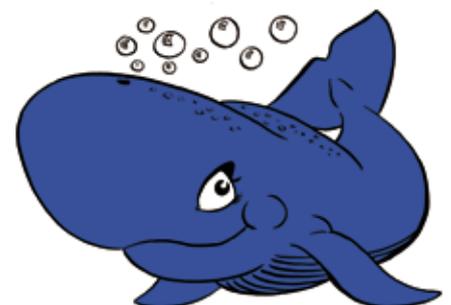
*Note: The activities included in this lesson plan can be conducted over a course of study.

SKILLS

Developing a sense of • Place • Space • Using pictures, maps and globes.

Developing geographical investigation skills by • Observing • Investigating and experimenting

Recording and communicating.





HISTORY

Title: WHO IS JOHN PHILLIP HOLLAND AND WHAT BOATS SINK AND FLOAT?

<http://oar.marine.ie/handle/10793/933>

Strand:
History

Strand Unit:
Story

OBJECTIVE(S)

The aim of the lesson is to introduce students to an Irish marine historical personality called John Phillip Holland, who was responsible for influencing the design of submarines. By designing their own DIY submarine, students will also learn about boats that can sink and float.

SKILLS

Working as an historian • Change and continuity • Synthesis and communication.



MATHEMATICS

Title: RECORDING THE TEMPERATURE OF THE SALTWATER AQUARIUM

Strand:
Measures

Strand Unit:
Time and Temperature

OBJECTIVE(S)

The aim of this study is for the children to record the temperature of the classroom and aquarium water over a set period of time. The children will compare their findings and evaluate if the classroom temperature influences the aquarium's water temperature.

SKILLS

Develop skills through applying and problem solving: • Communicating and expressing • Integrating and connecting • Reasoning • Implementing • Understanding and recalling.

Additional Mathematic lesson plans and worksheets are available to download from www.explorers.ie




ENGLISH
Title: EXPLORERS AQUARIUM – CREATIVE WRITING BOOK
<http://oar.marine.ie/handle/10793/936>
Strand:

 Oral Language • Reading
Writing

Strand Unit:

Receptiveness to language • Competence and confidence in using language • Developing cognitive abilities through language • Emotional and imaginative development through language.

OBJECTIVE(S)

The students will become familiar with the English and as Gaeilge names of the animals that live on the Irish seashore. The students will develop their creative skills, writing a story about an imaginary species the class has discovered in their aquarium. The students are to write and read aloud the stories in class, using English and/or as Gaeilge.

SKILLS

Develop skills through • Receptiveness to language, reading, listening and understanding • Writing, spelling, grammar, drafting, revising and editing • Developing imagination, confidence in using oral language, and creative skills • Extend and develop vocabulary and spelling.

Title: WRITING POETRY ABOUT IRELAND'S SEASHORE AND OCEANS
<http://oar.marine.ie/handle/10793/880>
Strand:

 Oral Language • Reading
Writing

Strand Unit:

Receptiveness to language • Competence and confidence in using language • Developing cognitive abilities through language • Emotional and imaginative development through language.

OBJECTIVE(S)

Students will learn about the different types of poems using structures and formatting techniques. As part of the lesson, students will read, listen and develop their understanding of a poem by expressing their reaction through discussion. The students will use their creative thought to write a poem about the seashore and Ireland's oceans.

SKILLS

Develop skills through • Receptiveness to language, reading, listening and understanding • Writing, spelling, grammar, drafting, revising and editing • Developing imagination, confidence in using oral language, and creative skills • Extend and develop vocabulary and spelling.

Title: CREATING A NEWSLETTER / NEWSPAPER<http://oar.marine.ie/handle/10793/934>**Strand:**

Writing

Strand Unit:

Receptiveness to language • Competence and confidence in using language • Developing cognitive abilities through language • Emotional and imaginative development through language.

OBJECTIVE(S)

Creating a class newsletter; the children will build their vocabulary and writing skills through drafting, revising, editing, and publishing. Students will become familiar with the process of producing formal written documents, such as magazines and newspapers. Through interaction with others in the class, students will also learn how to work within a team environment.

The students are to write a selection of stories in both English and as Gaeilge. The following themes / téamaí may be used in the articles:

- Myself / Mé féin • School / An scoil • Food / Bia • Television / An teilifís • Past times / Caitheamh aimsire
- Weather / An aimsir • Special occasions / Ócáidí speisialta

SKILLS

Develop skills through • Receptiveness to language, reading, listening and understanding • Writing, spelling, grammar, drafting, revising and editing • Developing imagination, confidence in using oral language, and creative skills • Extend and develop vocabulary and spelling.



A selection of Explorer Lesson plans are available through Irish covering a range of the curriculum subjects. Please see the Gaeilge section of www.explorers.ie for more information.





VISUAL ARTS - LESSON PLANS

Title: DRAWING STILL LIFE SCENES OF ITEMS FROM THE SEASHORE

<http://oar.marine.ie/handle/10793/999>

Strand:
Construction

Strand Unit:
Making • Drawing • Looking and Responding

OBJECTIVE(S)

The aim of the lesson plan is for children to create still life drawings of items from the seashore. The children will be enabled to respond to other artist's works as well as completing their own drawings by experimenting with the marks, lines, shapes, textures, patterns and tones that can be made with different drawing instruments on a range of surfaces. The children will respond to the pictures created in class by talking about his/her work, as well as the work of other children.

SKILLS

Developing awareness of • Line • Shape • Form • Colour and tone • Texture • Pattern and rhythm • Space.

Title: SAVE THE SEAS POSTER

<http://oar.marine.ie/handle/10793/929>

Strand:
Drawing • Painting and colour • Fabric and fibre

Strand Unit:
Making drawings • Creating in fabric and fibre • Looking and responding

OBJECTIVE(S)

The children will develop drawings, paint and colour, as well as use fabric, fibre (including shells, seaweeds, flotsam and jetsam from the seashore) to create a 3D - poster showing how people can protect the marine environment and save the sea. This lesson plan should be delivered after the students have learned about the environment and the sea.

SKILLS

Developing awareness of • Line • Shape • Form • Colour and tone • Texture • Pattern and rhythm • Space.

Developing receptiveness to language • Competence and confidence using language • Developing cognitive abilities through language • Emotional and imaginative development through language.



Lesson plans relating to Music and PE are also available on www.explorers.ie

EVALUATION

Title: SEASHORE MARINE TABLE QUIZ

<http://oar.marine.ie/handle/10793/943>

Strand:
Science / Geography

Strand Unit:
Plants and Animals • Local and natural environment
• Land and seas of my country

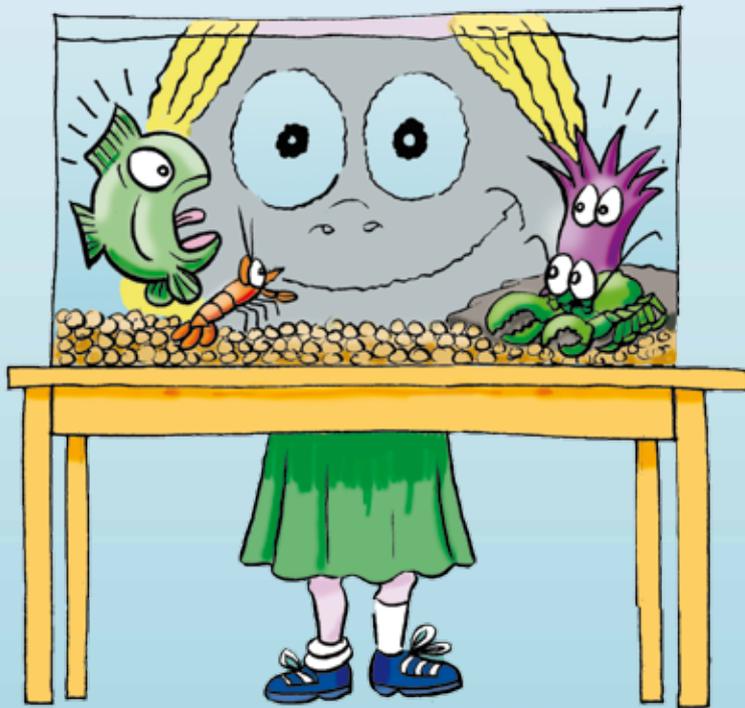
OBJECTIVE(S)

Develop an increased awareness of plants and animals that live in local marine environments including the seashore, seas and oceans of Ireland. After learning all about the seashore and other marine related lessons, this quiz can be used to evaluate the student's knowledge of the marine related living things and natural environments relating to the marine. The table quiz can be used as a guide, highlighting facts about the marine environment and some of the animals that live there.

SKILLS

Develop an understanding and knowledge about the seashore and marine environment • Work in a team setting
• Work scientifically questioning and observing.

Please refer to the Explorers Education Programme's website www.explorers.ie for more information, tips and techniques to evaluate your classes learning experiences relating to the marine and ocean literacy.



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