

## Lesson Plan 1: EXPLORERS MSP WHERE WE LIVE - OUR PLACE & OUR SPACE (LAND & SEA)

Subject: Cross curricular – Science, Geography, Language

Class: 10-12 years

Time: Approx 30 min

Materials & Resources:

- PowerPoint Presentation: Marine Spatial Planning – Our Ocean Our Future
- Large map of Ireland – showing the boundaries of Ireland's National Marine Planning Framework area (on screen). A physical map may be provided as part of the Explorers outreach programme visiting the class.
- Pictures of marine activities laminated: fishing boats, cargo ships, wind farms, cruise ships, divers, marine animals, research vessels, etc.
- Marine Spatial Planning Information sheets (booklet)
- Teachers Guide – New Words and Vocabulary for children

Other materials for the class:

- Construction paper or large sheets of paper
- Markers, crayons, coloured pencils
- Scissors (optional, for cutting out activity pictures)
- Glue or tape
- Whiteboard or flip chart

AIM: The introductory lesson plan provides children with an understanding of the size of Ireland's marine territory (the Real Map of Ireland) and the area dedicated to Ireland's National Marine Planning Framework. They will gain an understanding of how maps have been used from past discovery of land, how we use maps today, and the importance of mapping valuable space that needs to be planned for future planning.

OBJECTIVES:

1. Learn about Ireland's marine territory and resource highlighting what it is used for: swimming, fishing for food, shipping for transport, recreation, lots of marine biodiversity.
2. Understanding the significance of mapping as part of planning how the land and ocean is used for human activities – from ancient mapping to modern maps used for planning our future.
3. Identifying and creating ideas of how Ireland's ocean resource can be used by lots of different people.

## LESSON PROCEDURES:

### Teacher-led Class Discussion / Presentation / Activities:

#### Part 1: Our Island – Our Home

- Prompt class with key questions for class discussion about where they live including the land and sea that makes our place and space:
  - Begin by asking students what we use land for around Ireland. Prompt the with examples: building homes, schools, farms to produce food that we eat, cities and towns with shops to buy food and clothes, forests to grow trees, parks and rivers for wild plants, trees and animals can live...
  - Next ask students what do we use our ocean for? Ideas could include: swimming, fishing for food, shipping for transport, recreation, lots of marine biodiversity etc)
- Get the students to work in teams creating a MIND MAP. Draw a huge island, linking all of the activities that humans need on land and in the ocean.
- Prompts:
  - What sort of natural things would you want on the island? Nature Zones – parks, beaches, rivers, areas to learn about nature and biodiversity, gardens
  - What sort of human activities would you include? Lots of villages, towns, and cities around the country that are near the ocean.
  - Recreation and Fun Zones – on land, near beaches / on the water, or in buildings
  - Sport's spaces - Creative Zones – art and craft areas, museums, building sheds,
  - Transportation – roads, rails, footpaths, don't forget places for walking and biking, perhaps futuristic transport such as automated vehicles, monorails, personal drones that take you to where you need to go.
  - Living spaces – Houses / homes – using imaginative architecture for your homes
  - Public spaces – Parks, Restaurants with yummy food, Shopping areas
  - Education spaces - Cool Schools, Colleges, Universities
  - Port – ships that bring us goods from overseas / and where we export the things we make and produce.
  - Energy production – spaces that produce clean energy
- Talk about how we have to **share the land**. Different people need it for different reasons, so we have to plan carefully. This is why we have to map out areas for houses, farms, and protected areas for animals and plants.

- The key takeaway: Establish with the class that we use both the land and the sea for so many important things and it is also important to recognise areas that are needed to protect our biodiversity on land and in the sea!

### Part 2: From Ancient Maps to Modern Maps

- Briefly show them some cool, old maps, like one from ancient Babylon (the oldest map ever discovered – 6<sup>th</sup> century BCE), a nautical chart used for navigation, and a historical map of Ireland. This helps them see how maps have always been used for planning and understanding our world.
- Introduce a modern map of Ireland - Establish some examples of where children have seen or used maps?
  - Google maps-navigation
  - Weather forecast maps -show what the weather will be like in certain locations;
  - Strava-sports, and orienteering.
- Locate the coastal counties on the map of Ireland.

### Part 3: Our Ocean – Mapping Our Ocean Space

- Next, reveal the big surprise!
  - Imagine a small island in the middle of a gigantic ocean. What if you found out that the ocean area that belongs to the island is seven times bigger than the land itself? What would you do with all that ocean? How would you plan for it?
  - Introduce the Real Map of Ireland. Explain that over many years, marine researchers and scientists have used special research vessels to map Ireland's seabed territory.
    - Highlight different maps created – Bathymetry map, Current maps, Sea surface maps.
  - More recently, an area called the National Marine Planning Area, has been established so we can now properly plan for the development and protection of our ocean and seas.
    - Point out the key showing the different boundary areas.

## Wrap-up

- Wrap up by reinforcing the idea that Ireland's ocean territory is a huge, valuable part of our country. Just like we plan for our towns and forests, we need to plan for our seas to use them wisely for food, energy, transport, and to protect the amazing animals that live there.
- Review the key concepts for the next lesson – see Lesson Plan 2: Develop digital skills learning to use the Explorers Digital Interactive Marine Spatial Planning Map. Identify the areas and challenges of using the same marine spaces  
Introducing the idea of Marine Spatial Planning & the Designated Maritime Area Plan (D-Map).