



**EXPLORERS**  
**OUR OCEAN OUR**  
**FUTURE**

**Marine Spatial  
Planning for Kids**

# CHILDREN'S WORKBOOK

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Explorers Our Ocean Our Future – Marine Spatial Planning resources are available on [www.EXPLORERS.ie](http://www.EXPLORERS.ie). They include:

- Explorers Marine Spatial Planning [Interactive Map](#)
- Handbook and Guide,
- Information Sheets
- South Coast DMAP
- Marine Spatial Planning Photos Resource Pack and lots more

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ECONOMY

ENVIRONMENT

SOCIAL ENGAGEMENT





# OUR ISLAND - OUR HOME



## Project: The Blueprint of "Nova Island Map"

### Mind Map Challenge

Imagine you are the Lead Architect for a brand-new island rising out of the ocean. Your job is to design an island and ocean around it that balances nature, new jobs, technology, and fun. Use this worksheet to brainstorm your ideas before drawing your final Master Nova Island Map.

1. **Brainstorming Categories:** Fill in your ideas below to help you plan your map drawing!

Category	Your Creative Ideas
<b>Nature Zones:</b> What does the island look like? What kind of animals live on the land and in the ocean?	
<b>Living Spaces:</b> Where do people live?	
<b>Energy Production:</b> How do you power the island without pollution? Wind? Solar? Waves?	
<b>Public Spaces:</b> Where are the Parks, Restaurants, Shopping areas?	
<b>Creative Zones:</b> Where do people make art, play music, write stories? Is there a giant museum?	
<b>Transportation:</b> Traditional cars are so last century. How will your citizens travel?	
<b>Recreation:</b> What fun things happen in the water?	

### SPATIAL FACT!

Did you know that the oldest known map discovered is the *Babylonian Map of the World*. It dates back to the 6<sup>th</sup> century BC and includes references to the "salty sea".

2. **Your island isn't alone! It needs to connect to the rest of the world.**

● **The Port:** Draw a busy harbour where ships bring in goods. What is one thing your island exports (makes and sells) to the world?

● My island sells: \_\_\_\_\_

● My island needs: \_\_\_\_\_

Map Title .....

By .....

3. **Were you able to fit everything on our map?**

Explain: \_\_\_\_\_

4. **Team up with your classmates and plan a Grand Nova Map of your island on a larger scale, sharing your ideas and challenges. After you have your map ideas, write down one thing that you liked about the other ideas?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_





# MODERN MAPS & APPS

What are some examples of modern maps?



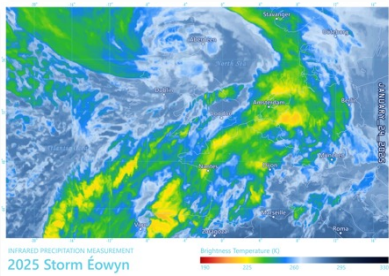
**SPATIAL FACT!**

Did you know the earliest known map of Ireland was created by **Claudius Ptolemy** around **140 AD**.

We use a lot of maps now on our phones and computers. These are often referred to as digital maps or apps that provide us with a mapping tool. Can you match the names of maps with the pictures of digital maps and apps?

Google Maps • Weather Forecast App • Strava Maps.

**A**



Explain a mapping App that you use, and what you use it for:

.....

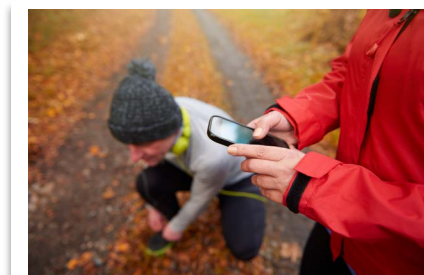
.....

.....

**B**



**C**



# MAPPING OUR LAND & OCEAN SPACE

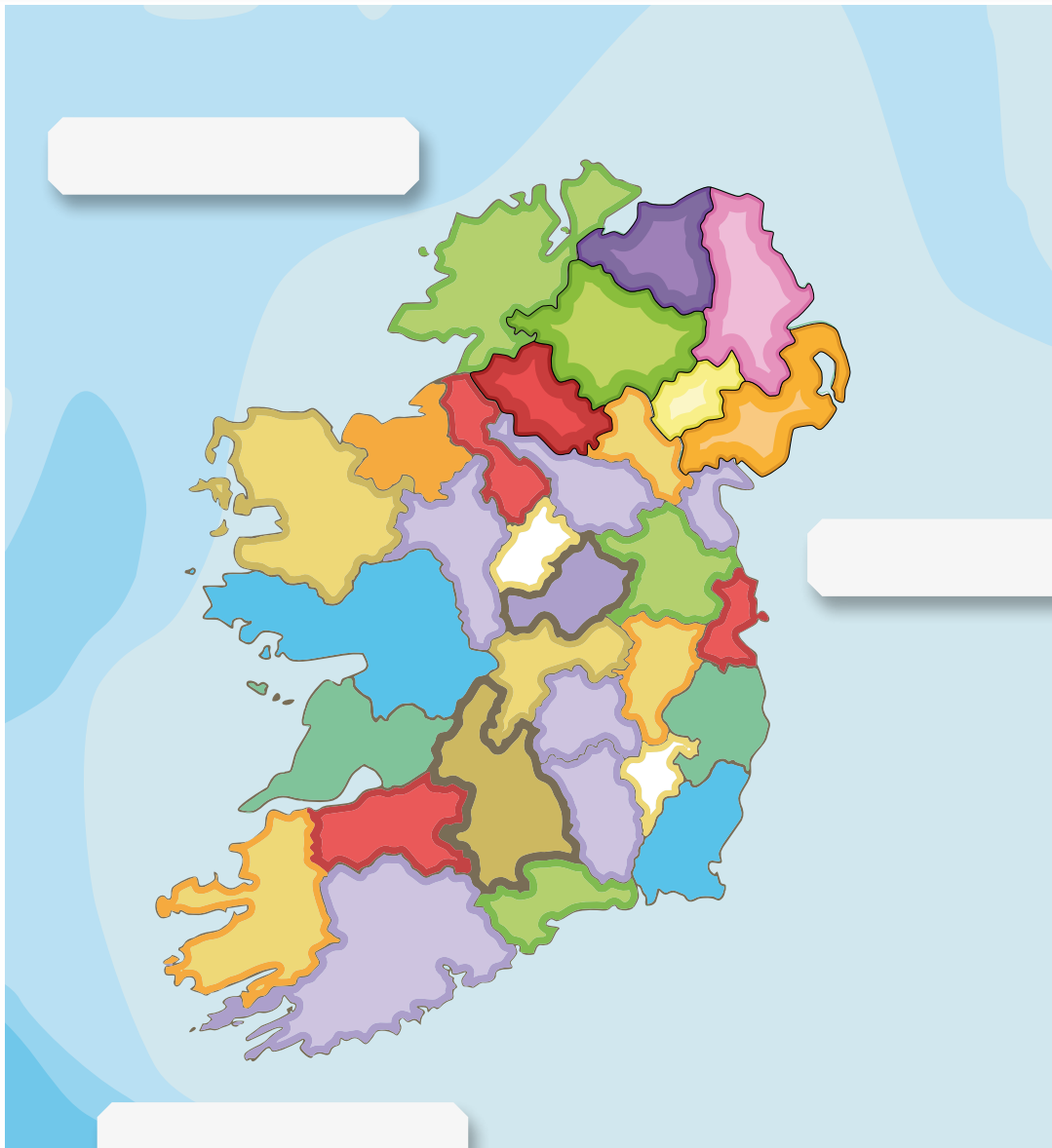


Locate the county that you live in on the map of Ireland.

Can you name the coastal counties on the map of Ireland?

**Donegal • Leitrim • Sligo • Mayo • Galway • Clare • Limerick • Kerry • Cork •  
Waterford • Wexford • Wicklow • Dublin • Louth • Meath • Antrim • Down • Derry**

Locate the **Atlantic Ocean**, **Irish Sea**, and the **Celtic Sea** that surround Ireland on the map of Ireland.



# MARINE SPATIAL PLANNING - IDENTIFYING THE USERS OF THE OCEAN

The **National Marine Planning Framework** is our roadmap of how we can connect with the ocean in a responsible way. It helps us protect the sea while making sure there's room for everyone—whether they are there to work, explore, or just have fun!

**DIVE IN** and think about the different ways we use the ocean.



How many industries and activities can you list where people rely on the ocean for their work:

1. ....
2. ....
3. ....
4. ....
5. ....



Identify thy type of job that a person might have that is responsible for ocean conservation and restoration? Explain what they do:

.....

.....

.....

.....



Social connections and engagement is about how the ocean is part of who we are. Write down one thing that you love about the ocean:

.....

.....

.....

.....

# MARINE SPATIAL PLANNING - LET'S DIVE IN!

What is Marine Spatial Planning?

Match up the statements with the words below to help explain what it means:

It's referring to 'the space' or about an 'area'

it means thinking ahead, making decisions, or organising

it's the ocean area

Marine: .....

Spatial: .....

Planning: .....

A **Marine Spatial Map** shows where people work, play, and protect nature along Ireland's coast.

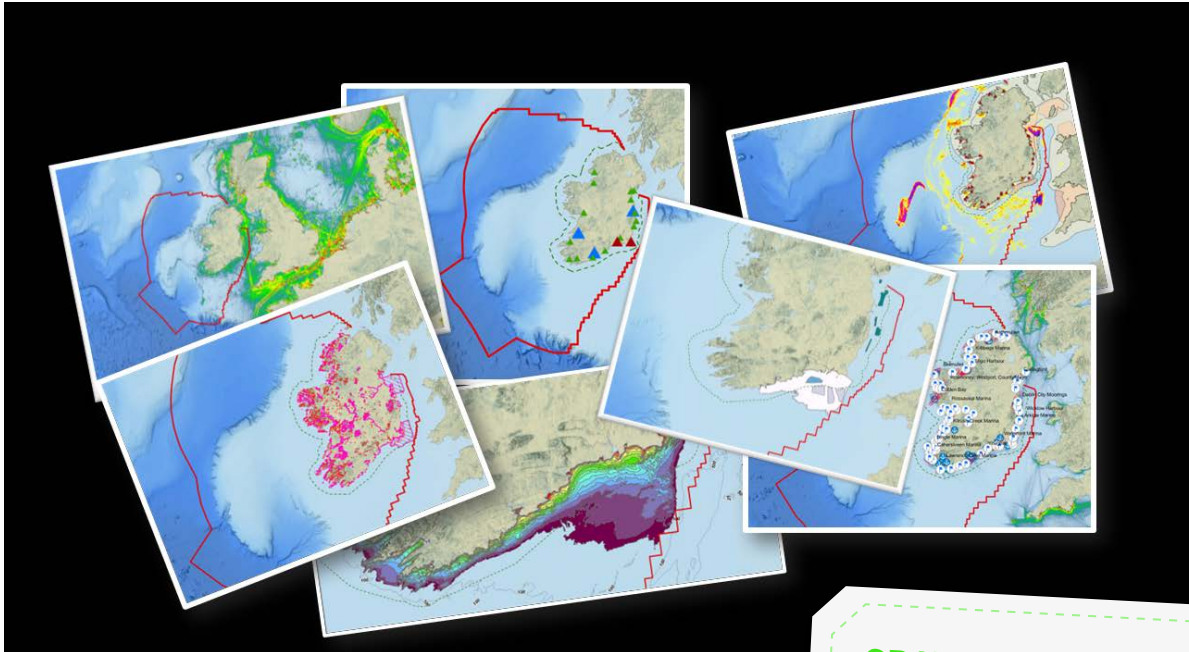
Use the outline of Ireland to start your planning.

Create a key with icons to represent the different users of the ocean.



# CREATE YOUR OWN MARINE SPATIAL PLAN MAP!

Spatial planning is like creating a 3D jigsaw using lots of maps layered on top of each other. Develop your digital skills by learning to use the **Explorers Marine Spatial Planning Interactive Map** (see [www.EXPLORERS.ie](http://www.EXPLORERS.ie)).



As you are using the digital map, investigate and answer the questions to help you learn more about the different marine activities around Ireland.

Check out the Explorers Our Ocean Our Future: Marine Spatial Planning resources to help you find the answers: ● Handbook and Guide ● Information Sheets ● South Coast DMAP.

## SPATIAL FACT!

**Ireland's National Marine Planning Area** was established to help develop and protect the ocean. The area is seven times the size of its land area above the sea!!!

## PORTS

- What is a port? .....
- Why are some ports represented by larger symbols than others?  
.....  
.....
- Why are towns and cities usually built near ports?  
.....  
.....

## BOUNDARIES

Ireland has one of the largest marine territories in the EU.

Using the key on the map of Ireland and its marine territory, what does the purple outline represent?

.....  
What does the red line represent? .....

.....  
Can you explain what the 12NM Sea Limit is? .....

.....

## OCEAN DEPTH

Using the interactive map of Ireland, the contours show the ocean depth surrounding Ireland.

- What is the deepest and shallowest marine areas surrounding Ireland?
  - Shallowest waters: .....
  - Deepest waters: .....
- Why is it important to know the depth of the ocean for the following industries:
  - Fishing: .....
  - Wind Turbines: .....
  - Habitats: .....
  - Safety: .....

## SEAFOOD / FISHING PORTS

Different fish species are brought to different ports. A heatmap shows where vessels are fishing in Ireland's core fishing grounds, with the darkest purple areas showing the highest concentration of fishing vessels.

- How many fishing ports can you locate? .....
- Why are fish often brought to the nearest port? .....

## FISHING ACTIVITY / FISHING GROUNDS

Some areas of the sea are important spawning and nursery grounds for marine species.

- Why might fish choose specific areas as spawning and nursery grounds?  
.....
- Why is it important to protect these areas?  
.....



## AQUACULTURE SITES

Aquaculture is like farming in the ocean. In Ireland, this is a really big business, worth a whopping €150 million!

- Can you name three different species that are farmed in the ocean?

.....

.....

## OFFSHORE WIND IRELAND

If someone wanted to invest in a wind farm in the ocean, what would they need to consider for the wind farm site?

- What type of wind do they need to have to operate? .....

.....

- What is a good seabed type and at what depth is best to have wind-turbines?

.....

- Why do they need to be close to large ports?

.....

## MARINE TRANSPORT

- What is the difference between the cargo ship and passenger ferry density?

.....

- Where do most of the journeys originate from?

.....

## SPECIAL PROTECTED AREAS-BIRDS

- Why are Special Protected Areas for birds mostly close to land?

.....

## SPECIAL AREAS OF CONSERVATION

- Why are there so many Special Areas of Conservation in coastal areas?

.....

## RECREATION

The recreation map shows activities of how we are connected to the sea through things like sports and spending time at the beach.

- Where do these activities occur and do they occur in the same areas of other activities?

.....

.....

- Could other uses of the marine activities interfere with the recreational activities?

.....

.....

- Could these have a negative impact on marine areas?

.....

.....

## THE CHALLENGES OF USING THE SAME MARINE SPACES!

### When Ocean Activities Collide!

Explain when a lot of different things are happening in the same place, what might happen to the map? What does the map with the different layers on top of each other look like?

.....

.....

.....

.....

.....

.....

.....

.....



LIMERICK

TIPPERARY

KILKENNY

# THE BENEFITS OF MARINE SPATIAL PLANNING



## ENVIRONMENT RESTORATION



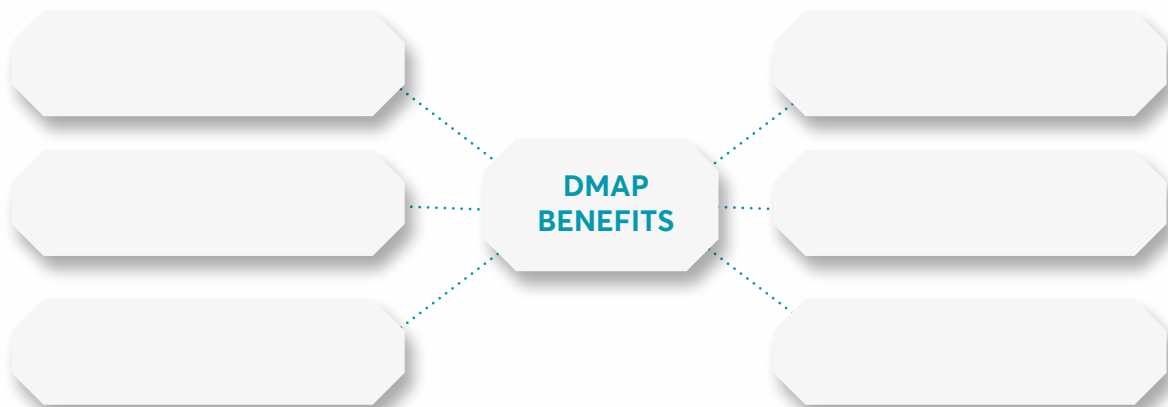
## ECONOMICS / INDUSTRIES



## SOCIAL CONNECTIONS

The people who are developing Ireland's Marine Spatial Plan are working with lots of people involved in the marine and the communities around Ireland. They aim to create specific plans that show exactly where certain marine activities are allowed. These plans are called Designated Maritime Area Plans (DMAP).

Why do you think having a Designated Maritime Area Plan for the ocean would be a good idea. Create a mind-map to show the benefits of having a marine spatial plan and a DMAP.?



Design a Designated Maritime Area Map Plan (DMAP). Use the inter-active mapping activities to create a layered map showing the users of the ocean that share the same space. Add to the map icons, like a handshake symbol, for shared zones.

- Where are the marine protected areas?
- Where would be a good place for fishing boats?
- Explain where a shipping lane would go?
- Where would you create a spot for divers to explore?
- What about a wind farm and a seaweed farm – can they be located in the same place?



# POSTER PLANNER

**YOUR GOAL:** Design a poster that convinces people that the ocean only thrives when we **plan it together**. Use this planning guide to gather your ideas, images, and map concepts before you create the final poster.

1. **Write a Catchy Title and Definition that shows how everyone has a seat at the Marine Spatial Planning Table:**

- Poster Title: .....
- **Definition:** Explain Marine Spatial Planning in 1–2 sentences, using the 'playground' or 'island planning' idea:  
.....  
.....

2. **List ideas of photos or images that represent the people and their interests in the ocean.**

*(e.g. a photo of a wind turbine, a drawing of a scuba diver)*

Thriving Marine Economy (Marine jobs)	Healthy Marine Environment (Marine life and habitats)	Social Connections (People, culture, and fun)

3. **Describe your visual ideas to help tell the 'Story' of your poster.**

The Problem No Planning = a "Messy Ocean"	The Solution Working together = Benefits
My Visual Idea:	My Visual Idea:



#### 4. Draft your 'Marine Spatial Planning' Poster

A large, blank white rectangular area intended for drafting a poster, framed by a light gray border.

### CALL TO ACTION



How can people get involved?

Write a message that encourages the reader of the poster to join the conversation.

Four horizontal dotted lines for writing a call to action message.





## GAME DESIGN

**The Challenge:** Your mission is to design a game that teaches people how to work together in developing a marine protected area, a seaweed farm, a shipping route for large ships, or an offshore wind farm, while keeping the ocean healthy and other ocean users happy.

### PHASE 1: THE BIG IDEA

Before we dive into the deep end, think about the kind of games you enjoy playing with your friends and family, such as a board game like Monopoly, a physical orienteering game, a digital quiz, or a card game?

1. **Brainstorming Game Concepts:** List your ideas of the type of game that you would like to develop:

.....  
.....

2. **Meet the Players (Marine User Roles):** Pick at least 4 roles that represent the different players that will be in your game. (Wind Developers, Fishers, Shipping Captains, Environmentalists, Divers etc)

Role 1: ..... Role 2: .....

Role 3: ..... Role 4: .....

### PHASE 2: MAPPING THE OCEAN

3. Explain the concept of your game and how players need to work together using a marine spatial map.

.....  
.....  
.....  
.....  
.....

## PHASE 3: CHALLENGES & SOLUTIONS

### 4. The Challenge and The Solution

A game needs a challenge! Design your **Challenge and Solution**.

(e.g. **Challenge:** A wind farm is planned where a whale migration route exists.

**Win-Win:** Build the farm but stop construction during migration months.)

Scenario / Challenge	The "Win-Win" Solution
1 .....	.....
2 .....	.....
3 .....	.....
4 .....	.....
5 .....	.....
6 .....	.....

## PHASE 4: HOW TO PLAY (THE MECHANICS)

### 5. Gameplay Rules and Instructions! Now, let's turn these ideas into a real game.

- Movement: How do players move? (e.g. rolling dice, drawing cards, or timed turns).

.....

- The "Win-Win" Bonus: How do you reward players for collaborating?  
(e.g. Do they get double points for a shared solution?)

.....

- Winning the Game: What does a "Win" look like?  
(e.g. Is it a certain number of wind farms built? Or a high "Ocean Happiness" score?)

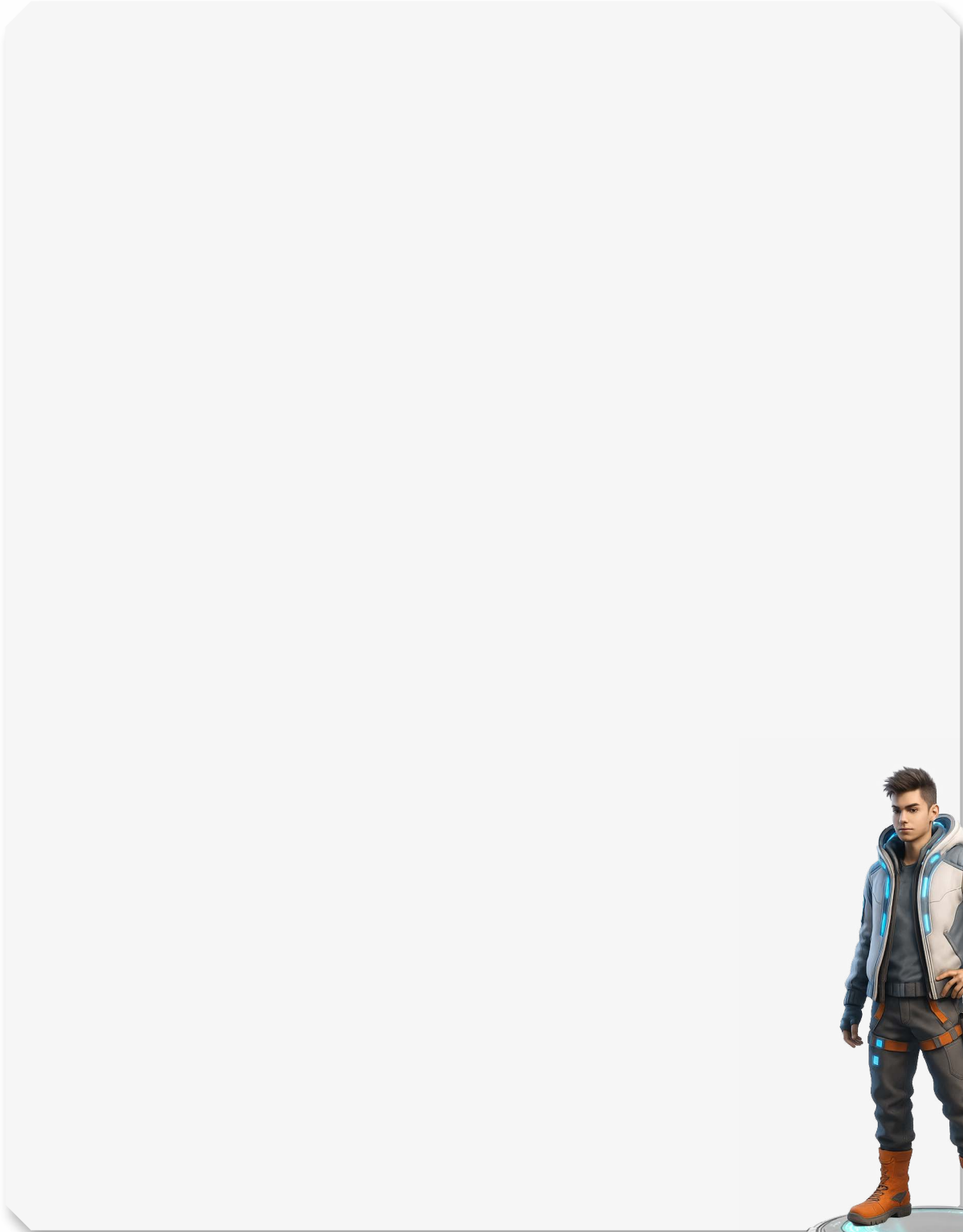
Explain how your game encourages players to work together so everyone feels they have worked out the challenges?

.....

## PHASE 5: YOUR GAME BOARD

### What does your game look like?

Design your Game Board – the Marine Spatial Planning Map • Player pieces – tokens to represent the players (e.g miniature boats, whales, wind-turbines) • Dice spinners • Challenge cards • Resource token /energy credits • Scorecards to track how many win-win solutions they brokered.





# EXPLORERS OUR OCEAN OUR FUTURE

## Marine Spatial Planning for Kids

### The Real Map of Ireland

