Ocean and Sea Borders

Students define the rules as they see fit for dividing the resources of the North Sea. They create a map defining those borders and allocating resources to individual countries.

GRADES
6, 7, 8

SUBJECTS
Geography, Physical Geography

CONTENTS
1 PDF, 1 Link

OVERVIEW

Students define the rules as they see fit for dividing the resources of the North Sea. They create a map defining those borders and allocating resources to individual countries.

For the complete activity with media resources, visit:

DIRECTIONS

1. Have a whole-class discussion about the guiding question for this activity.

Remind students that, in addition to providing transportation routes, oceans and seas contain valuable natural resources, such as oil trapped below the sea floor and fish. Ask:

- Who has the rights to these resources?
- How do we define the borders of country rights?
- Who ensures that resources are not being exploited beyond sustainability?
Write students’ ideas on the board.

2. **Introduce the activity.**

Divide students into small groups. Explain to students that their tasks will be to define the rules, in any way that they see fit, for dividing the resources of the North Sea and to create a map defining those borders. Make sure students understand that the borders they draw within the North Sea will allocate resources to individual countries. The only rules are that a country must have a coastline that borders the North Sea. Students do not necessarily need to give every country a share of the North Sea.

3. **Have students label their maps.**

Distribute a copy of the map Borders Within the North Sea to each group. Display the MapMaker 1-Page Map of Europe on the board. Invite volunteers to investigate which countries border the North Sea, and therefore have a potential claim to resources within the North Sea, and have all groups add country labels to their North Sea maps. Then invite volunteers to use the MapMaker 1-Page tool to navigate to the map for each of those countries and have groups add any other features from these maps to the Borders Within the North Sea map that might help in their decision-making. Prompt students with questions such as: Are there large port cities in any of these countries? How might this affect how a country wants to use the North Sea waterways?

4. **Have students define the rules for creating the borders and draw borders.**

Ask groups to discuss the ways in which they wish to define the rules for creating the borders. Then have them map the borders between countries that will divide the resources of the North Sea among the individual countries. Encourage students to consider how those rules would change if ocean or sea borders moved due to *climate change* and *sea level rise*.

5. **Have groups present their borders and rules to the whole class.**
Regroup as a whole class and have each small group present their borders and the thinking behind their decision-making. Allow other groups to ask questions after each group presents.

Informal Assessment

Evaluate groups' completed maps and presentations based on their geographic reasoning, or ability to reason about the characteristics of the location of the North Sea and its connections to the various countries with a coastline bordering the North Sea. Ask students to work independently to write a short essay on the importance of the ocean as a natural border.

Extending the Learning

Have students use the OSPAR Commission website to compare their own border scheme with existing international agreements.

OBJECTIVES

Subjects & Disciplines

Geography
- Physical Geography

Learning Objectives

Students will:

- define the rules for dividing natural resources of an ocean or sea
- create a map defining those borders

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Hands-on learning
- Writing
Skills Summary

This activity targets the following skills:

- **21st Century Student Outcomes**
  - Learning and Innovation Skills
    - Communication and Collaboration
    - Critical Thinking and Problem Solving
  - Critical Thinking Skills
    - Analyzing
    - Applying
    - Understanding
  - Geographic Skills
    - Analyzing Geographic Information
    - Asking Geographic Questions
    - Organizing Geographic Information

National Standards, Principles, and Practices

**NATIONAL COUNCIL FOR SOCIAL STUDIES CURRICULUM STANDARDS**

- **Theme 3:**
  People, Places, and Environments

**NATIONAL GEOGRAPHY STANDARDS**

- **Standard 1:**
  How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

- **Standard 13:**
  How the forces of cooperation and conflict among people influence the division and control of Earth’s surface

- **Standard 14:**
  How human actions modify the physical environment
• **Standard 16:**
The changes that occur in the meaning, use, distribution, and importance of resources

**ISTE STANDARDS FOR STUDENTS (ISTE STANDARDS*S)**

• **Standard 4:**
Critical Thinking, Problem Solving, and Decision Making

**Preparation**

**What You’ll Need**

**MATERIALS YOU PROVIDE**

- Colored pencils
- Pencils
- Pens

**REQUIRED TECHNOLOGY**

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector

**PHYSICAL SPACE**

- Classroom

**GROUPING**

- Large-group instruction
- Small-group instruction

**RESOURCES PROVIDED: HANDOUTS & WORKSHEETS**

- Borders Within the North Sea

**RESOURCES PROVIDED: MAPS**

- NG MapMaker 1-Page Map: Europe
Background Information

Oceans cover approximately 71% of Earth’s surface and contain 97% of the total water resources of the planet. The oceans are considered a common property resource; that is, no one country owns the world’s oceans or controls the resources found in them. As a result, oceans are often subject to the tragedy of the commons—the idea that if a resource is held in common for use by all, then ultimately that resource will be destroyed. Individuals, countries, or corporations often have little incentive to preserve or protect the ocean’s resources.

However, countries with ocean or sea borders do have some control over a limited area extending into the ocean from their coastal borders. The United Nations Convention on the Law of the Sea was signed on December 10, 1982. According to it, each coastal country’s sovereign territorial waters extend to a maximum of 22 kilometers (12 nautical miles) beyond its coast. Beyond these territorial waters, every coastal country can establish an exclusive economic zone (EEZ) extending 370 kilometers (200 nautical miles) from shore. Within the EEZ, a coastal country has the right to exploit and regulate fisheries, construct artificial islands and installations, use the zone for other economic purposes, and regulate scientific research by foreign vessels. Every coastal country has exclusive rights to the oil, gas, and other natural resources in the seabed up to 200 nautical miles from shore.

Prior Knowledge

Recommended Prior Activities

- None

Vocabulary

<table>
<thead>
<tr>
<th>Term</th>
<th>Part of Speech</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>border</td>
<td>noun</td>
<td>natural or artificial line separating two pieces of land.</td>
</tr>
<tr>
<td>city</td>
<td>noun</td>
<td>large settlement with a high population density.</td>
</tr>
<tr>
<td>Term</td>
<td>Part of Speech</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>climate change</td>
<td>noun</td>
<td>gradual changes in all the interconnected weather elements on our planet.</td>
</tr>
<tr>
<td>coast</td>
<td>noun</td>
<td>edge of land along the sea or other large body of water.</td>
</tr>
<tr>
<td>country</td>
<td>noun</td>
<td>geographic territory with a distinct name, flag, population, boundaries, and government.</td>
</tr>
<tr>
<td>exploit</td>
<td>verb</td>
<td>to use or take advantage of for profit.</td>
</tr>
<tr>
<td>natural resource</td>
<td>noun</td>
<td>a material that humans take from the natural environment to survive, to satisfy their needs, or to trade with others.</td>
</tr>
<tr>
<td>ocean</td>
<td>noun</td>
<td>large body of salt water that covers most of the Earth.</td>
</tr>
<tr>
<td>port</td>
<td>noun</td>
<td>place on a body of water where ships can tie up or dock and load and unload cargo.</td>
</tr>
<tr>
<td>sea</td>
<td>noun</td>
<td>large part of the ocean enclosed or partly enclosed by land.</td>
</tr>
<tr>
<td>sea level rise</td>
<td>noun</td>
<td>increase in the average reach of the ocean. The current sea level rise is 1.8 millimeters (.07 inch) per year.</td>
</tr>
<tr>
<td>sustainability</td>
<td>noun</td>
<td>use of resources in such a manner that they will never be exhausted.</td>
</tr>
<tr>
<td>transportation</td>
<td>noun</td>
<td>movement of people or goods from one place to another.</td>
</tr>
</tbody>
</table>

**For Further Exploration**

**Articles & Profiles**

- [National Geographic Education: Europe—Physical Geography](https://www.nationalgeographic.org/activity/ocean-and-sea-borders/print/)
- [National Geographic Education: Europe—Resources](https://www.nationalgeographic.org/activity/ocean-and-sea-borders/print/)

**Maps**

- [NG MapMaker 1-Page Map: Europe](https://www.nationalgeographic.org/activity/ocean-and-sea-borders/print/)
- [National Geographic Education: Europe MapMaker Kit](https://www.nationalgeographic.org/activity/ocean-and-sea-borders/print/)
- [NG MapMaker Interactive: Europe](https://www.nationalgeographic.org/activity/ocean-and-sea-borders/print/)

**Websites**

- [National Geographic Education: National Teacher Leadership Academy (NTLA)](https://www.nationalgeographic.org/activity/ocean-and-sea-borders/print/)