Saving the Mediterranean Sea

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Goals

- Students will understand how human activities have impacted the ecosystem in the Mediterranean Sea.
- They will identify the three main problem and create a plan to solve one of the problems.
- They will also be able to analyze the pros and cons of their solution plans.

Objectives

1. **Key topic - Protecting the Ecosystem in the Mediterranean**
2. **Essential Questions**

- What human activities are harming the ecosystem in this sea?
- What are some possible solutions for restoring health to the ecosystem?
- What are the potential “unintended side-effects” of these solutions?

3. **Students Will Be Able To**

- Identify and prioritize harmful activities to decide which one should be addressed first.
- Formulate a solution to one of the Mediterranean’s problems and evaluate the pros and cons of that solution.

4. **Long Term Application**

- Students will apply their understanding of the impact of human activities as they study seas and oceans the rest of the year.
- They will use this background knowledge to better understand the importance of ocean conservation and protection efforts.

Standards

2012 Oklahoma Academic Standards for the Social Studies:	2019 Oklahoma Academic Standards for the Social Studies:
Grades 6 and 7 World Geography Eastern Hemisphere Content Standard 1.5: Evaluate the effects of human modification of and adaptation to the natural environment	**6.4.1:** Describe the commercial agriculture and industrial regions that support human development. **6.4.2/7.4.4:** Evaluate the effects of human modification [on/of and adaptation to] the natural environment through transformation caused by subsistence and commercial agriculture, industry, demand for energy, and urbanization.

National Geography Standards from *Geography for Life:*

Environment and Society

14. How human actions modify the physical environment
15. How physical systems affect human systems
16. The changes that occur in the meaning, use, distribution, and importance of resources

Geographic Themes and Essential Elements:

Human-Environment Interaction

Procedures

Engage - Brainstorm how Picture A could cause the problem in Picture B?

Explore - Read article paragraphs in groups and share with the class

Explain - Mediterranean Sea PBL

Elaborate - Notes and class discussion about Goals for a Healthy Sea; Pristine Seas video

Evaluate - Exit ticket: “Do you think the Mediterranean Sea can be saved? If so, how? Write a 3-5 sentence explanation.”

Extension - Choose one of the projects from the Pristine Seas expeditions to research and compare/contrast with the Mediterranean Sea

From Wikimedia Commons

How could the activities represented in Picture A lead to the situation in Picture B?

List as many ideas as you can think of in 1 minute...GO!

What’s the Problem?

Human activities are harming the Mediterranean Sea’s natural environment.

Enric Sala Video

What’s CAUSING the Problem?

1. Overfishing
2. Tourism and overpopulation
3. Pollution

Goals for a Healthy Sea

- Large, growing fish populations
- Wide variety of species
- More predators, like sharks
- Healthy coral
- No plastic trash to harm wildlife and end up in human food supply
- Clean water

Pristine Seas Video

FISH ABOUND IN SPAIN'S MEDES ISLANDS MARINE RESERVE IN THE MEDITERRANEAN SEA. UNPRECEDENTED NEW RESEARCH TURNED UP HEALTHY ECOSYSTEMS IN WELL-ENFORCED MARINE RESERVES ACROSS THE MEDITERRANEAN. THE RESEARCH WAS LED BY NATIONAL GEOGRAPHIC EXPLORER-IN-RESIDENCE ENRIC SALA. PHOTO BY ENRIC SALA ©2012 NATIONAL GEOGRAPHIC.

Elaborate...

Mediterranean Sea

Problem Based Learning

Names:

Problem: Human activities have harmed the Mediterranean Sea's natural environment.

YOUR TASK: Identify the main causes of this problem and develop a solution for ONE of them. Use the resource list at the bottom of the page or research to find your own.

Causes (List at least 3 activities that are causing environmental problems in the Mediterranean)
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Your proposed solution (Write a plan with at least 5 details)

Benefits of this plan (At least 3)
Possible negative consequences of this plan (At least 3)

Resource List:

European Environment Agency
Environmental Issues in the Mediterranean
Plastics in the Mediterranean Sea
World Wildlife Foundation
How Laws Around the World Improve Ocean Health

Link to editable Google Docs version of this. You MUST "Make a Copy" under "File" to access your own copy. Do not request access.

Exit Ticket

Do you think the Mediterranean Sea can be saved? If so, how? Write a 3-5 sentence explanation.

Extension Options

1. Choose one of the projects from the Pristine Seas expeditions and research to compare/contrast with the Mediterranean Sea.
2. Create a presentation on “Things You Can Do to Save the Ocean.”

Resources

Video Clips

- Mediterranean - Sea of Plastic
- Tourists Cause 40% Spike in Plastics
- Taking Action on Overfishing
- Pristine Seas
- Ocean Now Project
- Enric Sala: Glimpses of a Pristine Ocean
- Tourists Cause 40% Spike in Plastics
- EU MedPartnership

Articles

Huge Swarms of Jellyfish in the Mediterranean

European Environment Agency
Environmental Issues in the Mediterranean
Plastics in the Mediterranean Sea

World Wildlife Foundation
How Laws Around the World Improve Ocean Health
Overfishing Remains Biggest Threat to Mediterranean

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