



## The Coast is Clear

**Grade:** K-3<sup>rd</sup> grade

**Topic:** Protection of Coastal Areas and Oceans

**Duration:** 40- 60 minutes

**Related Subjects:** Social Studies, Language, Health, Science and STEM.

### Objectives

Create awareness of coastal and ocean pollution due to human waste and how animals who inhabit these areas are affected. Use critical thinking to determine how trash can harm these animals or even humans. Develop empathy toward these animals who suffer and sometimes die due to pollution. Promote responsible behavior when visiting coastal areas. Encourage participation in activities that help protect these areas.



### Materials

- Medium or large sized plastic container (low sides) or aluminum trays. (Number of boxes or trays depends on quantity of students.)
- Natural objects like seashells, rocks, dead corals, etc. (Decorative purpose)
- Small or medium sized coastal and ocean animal figures
- Sand or fake sand ("how to" sheet attached), enough to fill 2 or 3 inches of box or tray.
- Images of clean and dirty beach. (attached)
- Trash often found at beaches and in the ocean (real or simulated). For example: fishing string, net (produce packaging), balloons, ribbon, disposable dishware, straws, plastic wrap or bags, bottle tops, food and/or candy wrappers, fake cigarettes ("how to" sheet attached)
- Information sheet (attached)
- Observation sheet (attached optional)
- Pencil

### Preparation

Create a simulated ocean in each box. Must include sand, natural objects, animals and trash. Wrap animal figures in trash or make them stuck in some way. Hide some animals and trash in the sand.

### Opening

- Present the activity by telling student you will all be going on an imaginary trip to the ocean.
- Ask if anyone has been to a coastal area or been in the ocean. How was their experience? Did they enjoy it? Did they see any animals? Was it clean or did they see trash?



- Explain what a coastal area is for those who do not know.
- Show both images of beaches and ask which one they like more and why.

## Activity

- You are now ready for your trip to the ocean.
- Explain how what happens on the coast is related to the ocean. Many ocean animals visit the coast. Consider that trash from the coast can be blown into the water or brought in by tides or waves.
- Divide class into groups around each box. They must not touch the boxes yet.
- Explain that their boxes represent the ocean and that they will find many things in them.
- Each group must remove the harmful things from the ocean. If they find an animal in danger they must help them.
- If using the worksheet, they can write or draw observations. (One per group)
- Guide students through the activity but allow them to find and determine how the trash can affect each animal.
- Set a time limit.

## Closing

- Finalize by indicating the time is up.
- Have each group present what they found and how the trash was affecting each animal. You can help identify the animals if they do not know their name. They can show their observation sheet if used.
- After they present, ask how they think all that trash got into the ocean and discuss how people can avoid this from happening
- Finally, explain that not all trash is as visible as what they found and that many animals eat trash like bags and pieces of plastic by confusing it with food. This can be dangerous for them and harm them inside.

## Suggestions

Being a sensory activity, it may be overwhelming for some students. In these situations, they can be assigned a specific task in their group that doesn't involve touching the sand.

A great extension activity may be a beach, river, park or lake clean up.



Attachment  
Images of Beaches







## The Coast is Clear

### Information Sheet

#### Responsible Practices to Protect Coastal Areas and Oceans.



- Use reusable items like cups, plates, spoons and forks, especially when visiting natural places. Bring an extra bag or container for the dirty dishes if you can't wash them there.



- Switch to reusable water bottles.
- Never let balloons loose in the air, They usually end up in the ocean.
- Make sure no toys get left in the sand.
- If you dig a hole or make a sandcastle remember to level it out.



- Never take a wild animal from their habitat.



- Take your trash back home with you. Wind, tides, waves and animals can turn over trash cans, spilling all the trash than can reach the water.



- Participate in nature "Clean Up" events to protect the environment and the animals that inhabit it.



*Thank You!*



## The Coast is Clear

### Observation Sheet

Write down the name or draw the animals you found in the ocean. Describe (written or verbal) how you think they were being harmed.

**Animal**

**Harm**



## The Coast is Clear How to make fake sand.

**IMPORTANT: This sand is made with wheat flour and baby oil. Please consider any allergies or intolerance before using this with any person.**

Real sand sold for construction is **not** recommended since it is extremely coarse and may contain sharp objects.

Fake sand is easy and inexpensive to make. Also, it can be fun to integrate the children in the making, or have it as an activity in its self.

This fake sand can be put away and reused.

Refined wheat is fine to use and less expensive. However, whole wheat has a more natural looking appearance.

### Ingredients:

- 4 cups of wheat flour
- 1 cup of vegetable or baby oil (Has a nice scent)
- large bowl
- mixing spoon

### Instructions:

- Add oil to bowl.
- Add the flour while mixing with the spoon.
- Once it starts clumping you can use your hands to continue mixing.
- Store fake sand in a closed container.

*This fake sand can be used for many other activities. You can also add oil based food coloring to it.*

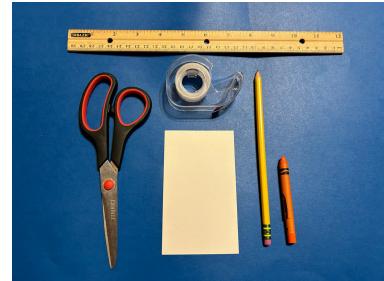




## The Coast is Clear How to make fake cigaret.

### Materials:

- Orange crayon, marker or colored pencil
- Plain index card (5 inches wide)
- Glue and/or clear tape
- Ruler
- Pencil



### Instructions:

- Cut the index card in half.



- Color one inch orange.



- Wrap the index card around the pencil.



- Tape or glue the index card to secure the cylinder shape.



- Remove the pencil.



- Can be cut shorter if prefered.