

ACTIVITY: Discover how our accidental trash and pollution makes its way from a neighborhood to the ocean and eventually to the deep.



GRADE LEVEL(S): K to 6th



20 minutes

OVERVIEW: Experience ocean pressure

DISCIPLINES: Science, geography, conservation

OBJECTIVES: Students will be able to:

- understand their role in protecting the ocean
- describe how pollution and trash is carried by water and wind to the sea
- discuss what might happen to the pollution, chemicals, and trash that gets into the sea
- name two ways pollution or trash harms ocean animals
- list three ways they can help reduce pollution and trash

MATERIALS:

Each learning group needs:

- Paint roller tray or liner
- River and/or decorative rocks
- Food coloring: yellow, green
- Small spray bottles with clean water
- Laminated photo of a local neighborhood or skyline (cover in plastic) OR Miniature houses, cars or other objects to represent a neighborhood

Suggested Pollution/Trash: Each group needs a small amount

- oregano (dried) (Represents plant/dirt run off or misc. pollution)
- crushed popped popcorn (Represents: plastics, Styrofoam)
- decorating sprinkles (Represents: trash)
- food coloring (Represents: soap, pesticides, fertilizer, oil and gasoline from cars)
- kosher or sea salt (Represents chemicals such as soap, pesticides, fertilizer, oil and gasoline from cars that sinks to deep.)

WHAT TO DO:

Preparation

- Find and print out a photo that represents a local neighborhood or your city. Laminate or cover in plastic. (One photo per learning group.)
- Tape the photo to the top of the paint tray, facing the inside of the tray.

Activity

Step 1: Have kids use rocks to create a local stream or river that runs from the neighborhood or city (top of paint roller tray) and eventually meets up with the sea.

Step 2: Show kids each kind of pollution and explain what each represents. (Gently, but clearly be sure kids understand that it's the kind of trash or pollution individuals create living our lives.)

Step 3: Have kids sprinkle a pinch of each kind of "trash" in the neighborhood and in and along the river. (Depending on the grade, you might want to direct how students take turns.)

Step 4: Have kids recreate rain with squirt bottle. Have them observe and discuss where or how far the pollution travels. What sinks? What floats?

Step 5: Next, add a couple 1 or 2 drops of the "chemical" pollution (food coloring) and a pinch of salt in the neighborhood. Once again, have kids recreate rain with squirt bottle to observe and discuss where or how far the pollution travels. What sinks? What floats?

Step 6: Have kids discuss what happens in the real world. Ask:

- *Where did all the pollution, the plastics, chemicals, and other pollution from our neighborhoods end up?*
- *What happens when the pollution gets into water?*
- *Besides rain, how else can pollution end up in streams, rivers then finally the ocean?*
- *Are there things we can do to protect the ocean?* (Make sure kids think about what they can personally do, not say what companies or factories should do.)