# Clean-Up Activity

#### Goal

Guide students in making observations of marine pollution while on the beach.

#### Introduction

Around 10% of all plastic produced will find its way to the ocean where it can harm marine wildlife and ecosystems. In the ocean, it can travel to one of the garbage gyres in the middle of oceans or be washed ashore by currents and waves.

### **Next Generation Science Standards**

Practices

- Planning and carrying out investigations
- Core Ideas
  - ESS3.C Human impacts on earth systems

**Crosscutting Concepts** 

- Systems and system models
- Influence of Science, Engineering, and Technology on Society and the Natural World

### **Supplies**

- Two transect tapes
- Gloves
- 5-gallon buckets or big trash bags

- Trash pickers (if available, not necessary)
- Data sheet and pencil for recording
- Mobile scale (for weighing

# Instructions

- Survey the beach and select a desired area for trash pick-up. The width of this area should be 10
  meters and the length should be 30 meters. Use the transect tapes to delineate the area where
  the trash will be picked. The 10 m line should run perpendicular to the water and the 30 m line
  should run parallel to the water. This will give you a 300 m<sup>2</sup> area of beach to pull trash from.
- 2. Once the site is selected and outlined, make a note of what is directly adjacent to the area that could have an influence on the trash or amount of trash found (trash cans, parking lot, grassy areas, etc.).
- 3. Pick up all of the debris clearly visible in the area and place in 5-gallon buckets or trash bags.
- 4. Once all of the visible trash is picked up, calculate the volume (L) and weight (kg) of the total trash and record these numbers in the data table below.

# Use the following table to record the total weight and volume of the debris found on the beach:

Date	Volume (L)	Weight (kg)



#### Discussion

- How do the surrounding areas affect the amount of trash or type of trash found in the chosen area?
- What sort of debris was most commonly found?
- Were the pieces of plastic large or small?

