

# Using Plastic to Protect Our Environment

**Standard\*:** C.4.1: Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.

C. 4.2: Use the science content being learned to ask questions, plan investigations, make observations, make predictions, and offer explanations.

C.4.8: Ask questions that might help focus or further an investigation.

**Objective:** Students will increase their awareness of the need to recycle and how plastics can be used to reduce waste. In addition to helmets made from various plastics which protect the head, these two concepts present realistic and practical information that will help to protect the environment which in turn will benefit the students.

**Materials:** For each group:

- 1 Large bag of pretzels and 5 –10 smaller bags of same pretzels equal to the ounces of the larger bag.
- 2 large bowls. 1 balance scale with weights.
- Paper, pencils, and data collection chart.

**Activity:** After reviewing previous knowledge/vocabulary (i.e. environment, resource, recycle, landfill, reduce, reuse), and following the scientific method of investigation, students will participate in an investigation to determine whether a large bag or several smaller bags of pretzels contain the same amount. After displaying the large bag and the smaller bags of pretzels and discussing why/when consumers might purchase each, students will make predictions as to which bag(s) holds more. Students will conduct the investigation by counting the pretzels and measuring the weight of each group of pretzels. They will make their observations and record their data. Based on their data/observations they will make a conclusion and note the accuracy of their hypothesis. (Students should realize they will get at least the same amount of pretzels with the larger bag and that this would produce less packaging waste than the several smaller bags.) Continue discussion to other food items that can be bought in different size packages and how students can make choices to buy items that will produce less waste. Finally, discuss the use of plastic containers for the purpose of carrying food and reusing them compared to wax paper and/or sandwich bags that are only good for a single use.

**Assessment:** Students will use the scientific method with 80% accuracy. Informal observations made by teacher of student comments regarding their family's purchases.

*\*Wisconsin Model Academic Standards*