

Lesson 3: Living Bar Graph Activity

Grade Level:

K-5

Concepts Taught:

Identification, bar graphing

Activity Time:

15-20 minutes (lesson)

10 minutes (follow-up activity)

Essential Questions:

- What are the different types of plastics?
- What are the numbers on plastics used for?
- What type of graph can be used to display differences in results?
- Which plastics are used more often? Less often?
- Can all plastics be recycled? Why or why not?

NCCore/Essential Standards:

Kindergarten: Math K.MD.3

Grade One: Math Standards 1.MD.4, 1.G.1;

Grade Two: Math Standards 2.MD.3, 2.MD.1

Grade Three: Reading For Informational Text Std 7; Writing Std 4; Math 3.MD.2—3.MD.4;

Grade Four: Math 4.MD.4;

Grade Five: Math 5.G.1

Materials:

Masking tape; plastic items collected from students; graphing sheet (next page).

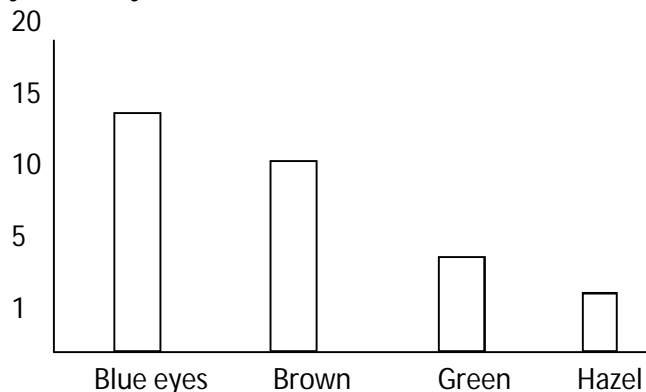


Objectives:

- students will identify the seven types of plastics and sort them by arranging a “living human bar graph”.
- Students will discuss differences and similarities in the plastic types using the bar graph as a visual aid.

Procedure:

1. Review graphing by asking each student to call aloud his or her eye color.
2. Instruct all students to keep track of each response by making tally marks or other techniques.
3. Discuss different methods students used to collect data: tally marks, numbers, etc.
4. Explain that using a bar graph is one way of displaying information in an organized way.
5. Make a sample bar graph on the board or on a transparency of the eye colors.



1. Explain to students that bar graphs are a way to count numbers of different things.
2. Using a line drawn on the floor or a piece of masking tape, create a “baseline” or x-axis with the numbers 1-7 so that students can use their bodies to create a bar graph. Use page 42 from the NEED book [Trash Flipbook](#) or the information located in the background section to identify common items with the different numbers.
3. Give each student a piece of plastic with a different number. The numbers on plastic are usually found on the bottom of the container inside the three-arrow recycling symbol.
4. Have students stand in a line at the number that matches their container.
5. Have students in each line count off and record numbers.
6. Ask students questions about the graph while still standing:

Which line is longest? Shortest? Did any lines have the same number?

7. Have students return to their seats and use the worksheet below to graph the data generated by the activity if appropriate for their level.

Extensions for Grades 3-5:

1. Have students make another bar graph using favorite colors or foods of students.
2. Students can make Venn Diagrams using certain characteristics of plastics such as color, presence of a neck on the bottle, etc.
3. Discuss which plastics were easiest to find in the classroom and at home. Why do you think this is?
4. Have students create another graph of favorite colors, foods, etc. using different colors of construction paper for the bars. Discuss how graphs visually depict data and the importance of neatness and simplicity in making a graph.

All About Plastics

Student Graphing Sheet

Name _____



1. Shade in the boxes below to show how many of each kind of plastic you saw today.

2. Answer the questions below.

eleven							
ten							
nine							
eight							
seven							
six							
five							
four							
three							
two							
one							

Kinds
of
Plastic