Teaching objective(s)

5. Interpret and analyze data and make predictions.

   b. Compare data and interpret quantities represented on tables and graphs, including line graphs, stem-and-leaf plots, histograms and box-and-whisker plots, to make predictions, and solve problems based on the information.

Instructional Activities

Activity 1

State to the class, “This morning we will explore ways to create bar and circle graphs with various information. (Ask students the following questions: “What is a graph?” “How are graphs used?” “Are graphs important?” “Why or why not?”) Ask the students, “What is a circle graph?” “What is a bar graph?” The teacher will give students an opportunity to answer the previous questions and help them to answer those they may be unsure about. Be mindful to make a clear distinction between a circle graph and a bar graph.

The teacher will tell students that together they are going to create a bar graph. Ask students to give suggestions for the bar graph. (For example, favorite food, class pets, etc.) After students select their title, poll the class to create the graph. Let’s say students choose their favorite color as the title. Write at least five colors on the board. Say a color and have students raise their hands when the teacher calls out their favorite color. Inform students to only raise their hand for only one color. Write down the number of students who voted beside the color they voted for. Record results of the survey on the board using a tally chart. Draw a bar graph next to the tally chart and allow students to come to the board and complete the bar graph with the teacher’s assistance, if needed.

The teacher will tell students that together they are going to create a circle graph. Ask students to give suggestions for the circle graph. (For example, favorite food, class pets, etc.) After students select their title, poll the class to create the graph. Let’s say students choose their favorite color as the title. Write at least five colors on the board. Say a color and have students raise their hands when the teacher calls out their favorite color. Inform
students to only raise their hand for only one color. Write down the number of students who voted beside the color they voted for. Record results of the survey on the board using a tally chart. Draw a circle graph next to the tally chart and allow students to come to the board and complete the circle graph with the teacher’s assistance, if needed.

Activity 2

Give each student a mini-pack of Skittles. Have them pour the skittles out on their desk. Instruct them to create a bar graph and circle graph indicating the results of the colors they find in their Skittles pack. The total number of each color will be graphed in the bar graph. For the circle graph, the students will graph the part of the whole for each color is being indicated. As the students are working on their graphs, the teacher will monitor and observe the students. The teacher will grade the activity for correctness and completeness.

Materials and Resources

- Pencil
- Paper
- Whiteboard
- Dry Erase Markers
- Mini-pack of Skittles

Assessment

- Teacher Observation
- Student Assessment