

The Graphing Game Show

Reporting Category Probability and Statistics

Topic Analyzing data displayed in graphs

Primary SOL 2.19 The student will analyze data displayed in picture graphs, pictographs, and bar graphs.

Related SOL 2.17

Materials

- Season Graph, Animal Graph, Desk Graph, Junk Food Graph (attached)
- Scissors
- Three envelopes or baggies

Vocabulary

picture graph, pictograph, chart, table, most, least, greatest, equal, data, bar graph

Student/Teacher Actions (what students and teachers should be doing to facilitate learning)

Note: Prior to conducting this activity, copy and cut out the graph question cards found on the attachments. Place the set of cards for each graph in an envelope or baggie labeled with the name of the graph.

1. Explain to students that they will play a game-show-like game that will help them analyze graphs. Group students into four teams with an equal number of players on each.
2. Display the Season Graph, Animal Graph, or Desk Graph, and have a student from each team select a question card that accompanies that graph and read it to his/her team members. Have team members confer and devise an answer to the question. Then, have each team share with the class their answer to the question. If the class decides that the answer is correct, the team receives one point. If the answer is determined to be wrong, the class gives the correct answer, and the team receives no point. Each team will have the opportunity to answer at least one question per graph. If each team has had one opportunity and there are still unanswered questions, continue with the first team.
3. Repeat step 2 with the other two graphs. The membership of the teams may be changed throughout the game, as needed.
4. As an assessment at the end of the game show, distribute copies of the Junk Food Graph, and have students analyze it and write statements about the data.

Assessment

- **Questions**
 - Provide students with a graph that does not have a title. What title would best fit with the data and labels shown on the graph?
 - How are picture graphs, pictographs, and bar graphs similar? How are they different?

- **Journal/Writing Prompts**

- You must explain to a kindergarten student what a graph is and how it works. You must choose one type of graph to show the student—i.e., a picture graph, pictograph, or bar graph. Which one would be best to choose? Why?
- Explain in writing the importance of a title on a graph.

- **Other**

- Use students' statements regarding the Junk Food Graph as an assessment.

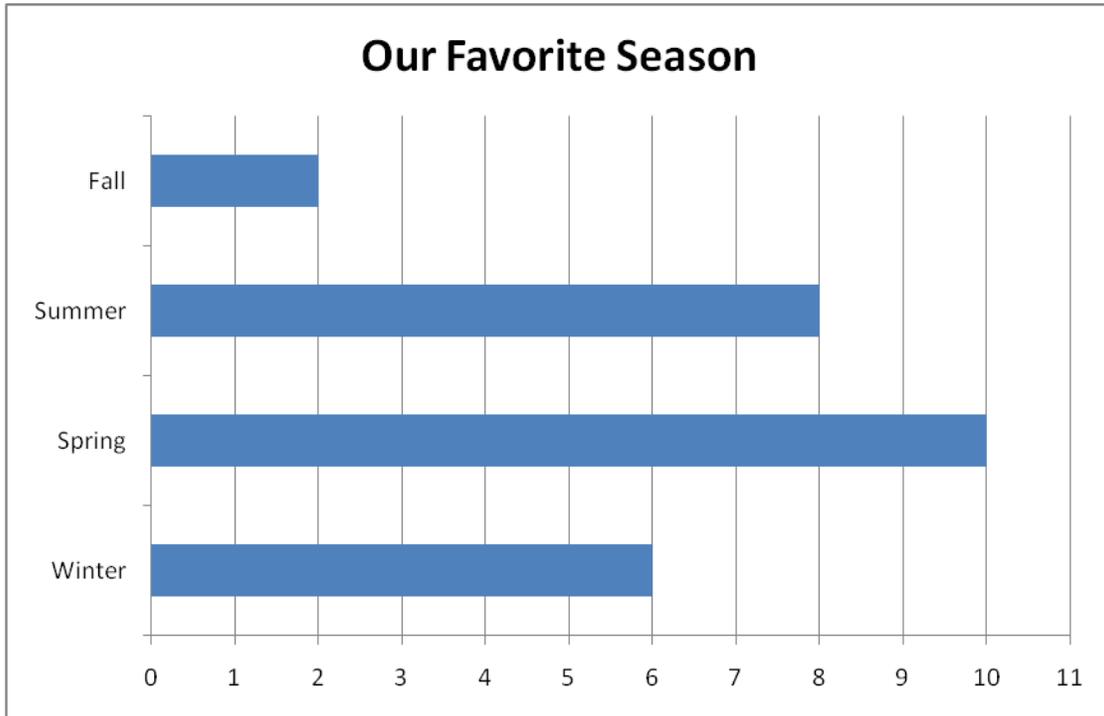
Extensions and Connections (for all students)

- This game can be played using graphs that students have made in previous lessons. Enlarge the graph(s) for the purpose of display.
- Have students create graphs using a computer program, create questions for the graphs, and then play the game in a learning center. Place each graph and its questions in a baggie to keep them together.
- Have students create a table or chart that shows that data in one of today's graphs.
- Have students create a bar graph that uses the same data shown in the Junk Food Graph.

Strategies for Differentiation

- Have students verbalize statements while a selected scribe records them on paper.
- To add a kinesthetic element to the game, have students hop or skip to the front to select their questions, or have students hop to the board to write answers to the questions.

Season Graph



Cut questions apart on the dotted lines.

What statement can you make about the season that was selected the **greatest** number of times?

What statement can you make about the two seasons that were selected the **least**?

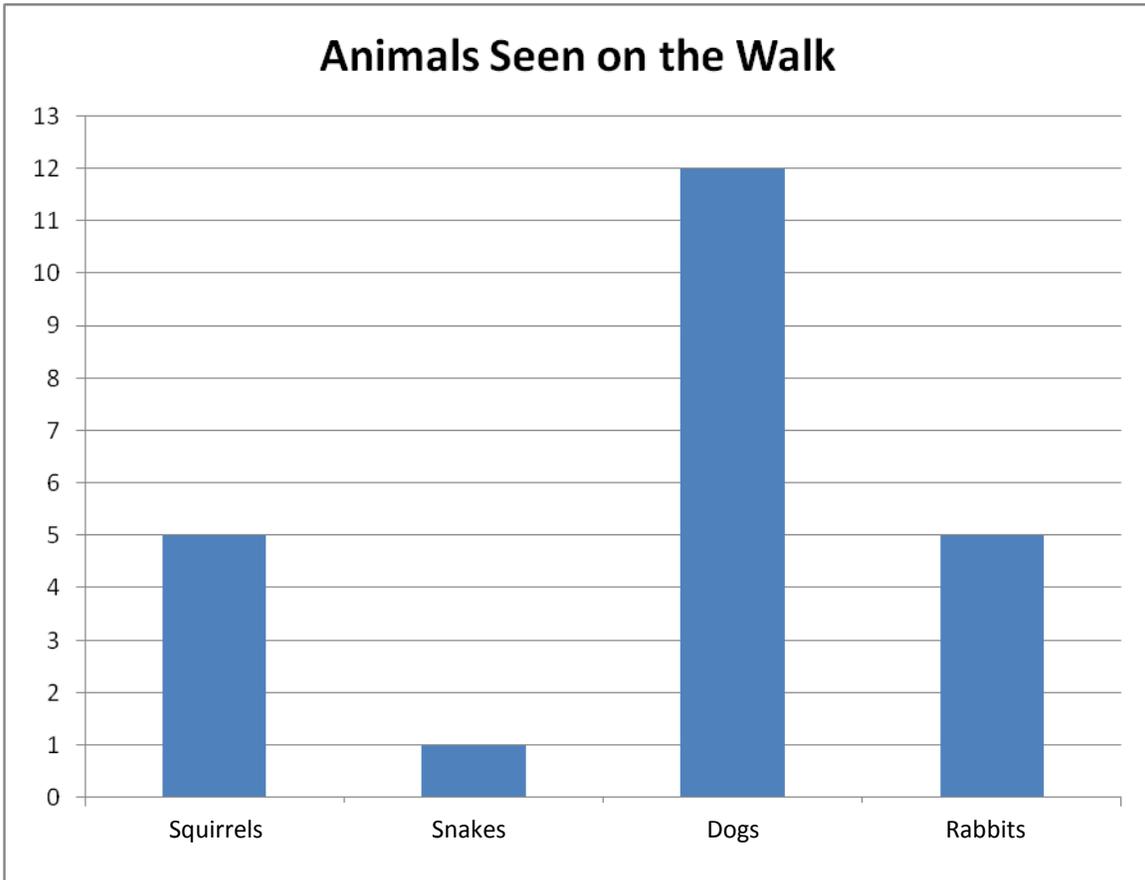
What statement can you make about the winter data?

What statement can you make about the fall and summer data?

What is the title of this graph?

Do any seasons have the same data?

Animal Graph



Cut questions apart on the dotted lines.

What statement can you make using the word *greatest*?

What statement can you make using the word *equal*?

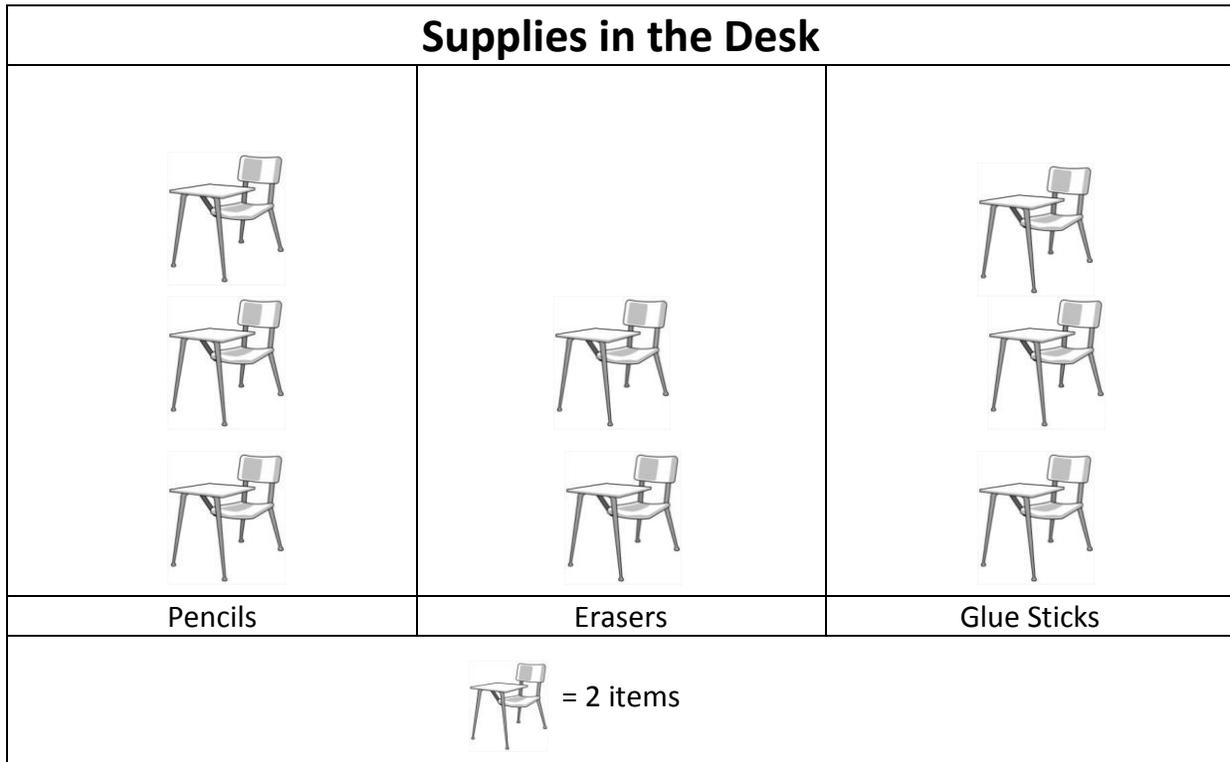
What statement can you make about the dog data?

What statement can you make using the word *least*?

What kind of graph is this?

How many more squirrels than snakes were seen?

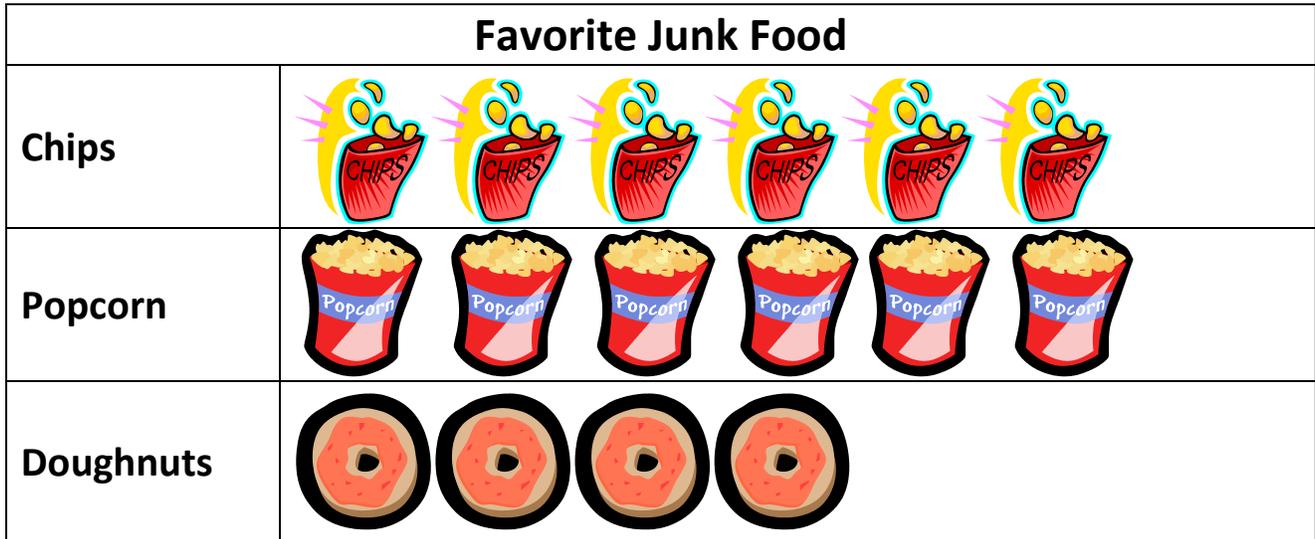
Desk Graph



Cut questions apart on the dotted lines.

<p>Which supply has the greatest amount?</p>	<p>What statement can you make using the word <i>equal</i>?</p>	<p>What statement can you make about the eraser data?</p>
<p>What statement can you make about the key of the graph?</p>	<p>What kind of graph is this?</p>	<p>What is the title of this graph?</p>

Junk Food Graph



Analyze this graph, and write about what you see.
