Circle Graphs

STRAND: Probability and Statistics

STRAND CONCEPT: Data Representation and Interpretation

SOL 6.10a

Remediation Plan Summary

Students will use the data set given construct circle graphs.

Common Errors and Misconceptions

Students have a difficult time reading circle graphs. They need more practice with converting data to fractional pieces in a circle graph.

Materials

- Population of English Speaking People
- rulers,
- construction of a circle graph activity sheet (Favorite Amusement Park Rides),
- circle graph construction assessment activity sheet (Favorite Chocolate Treat)

Introductory Activity

Display the "Population of English Speaking People" graph, work with the students to estimate the angle measures and answer the questions.
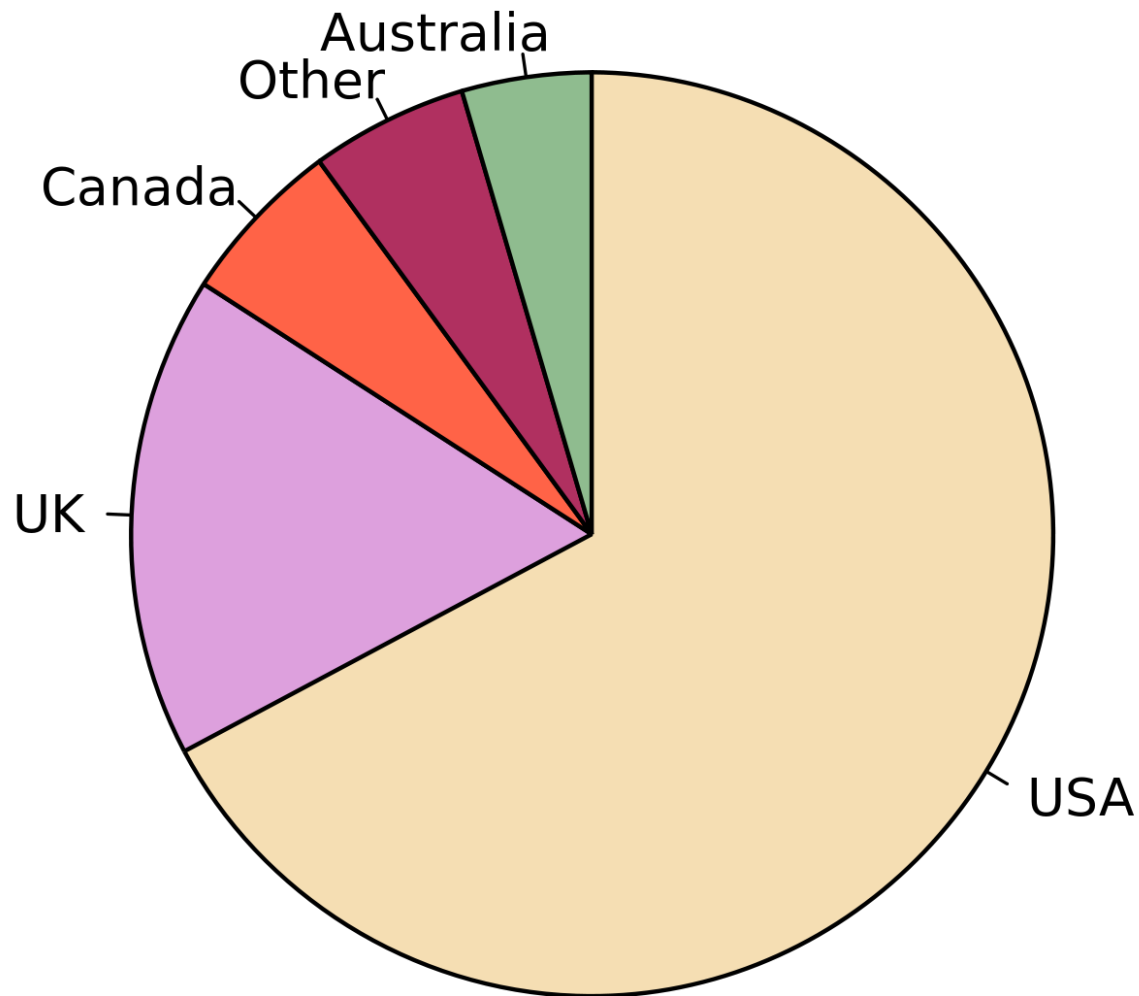
Plan for Instruction

1. The instructor describes the attributes of a circle graph and demonstrates how fractional pieces are determined from the data

2. The instructor provides a set of data (Favorite Amusement Park Rides Activity Sheet) for the students to generate a circle graph. Students work in pairs to construct the graph, share their results with another pair of students, and assess whether or not they have included all the attributes of a well-constructed circle graph.

Pulling It All Together (Reflection)

The instructor provides a set of data (Favorite Chocolate Treat Activity Sheet) for each student to generate a circle graph. Students work individually to construct the graph and self-assess whether or not they have included all the attributes of a well-constructed circle graph.

Note: The following pages are intended for classroom use for students as a visual aid to learning.

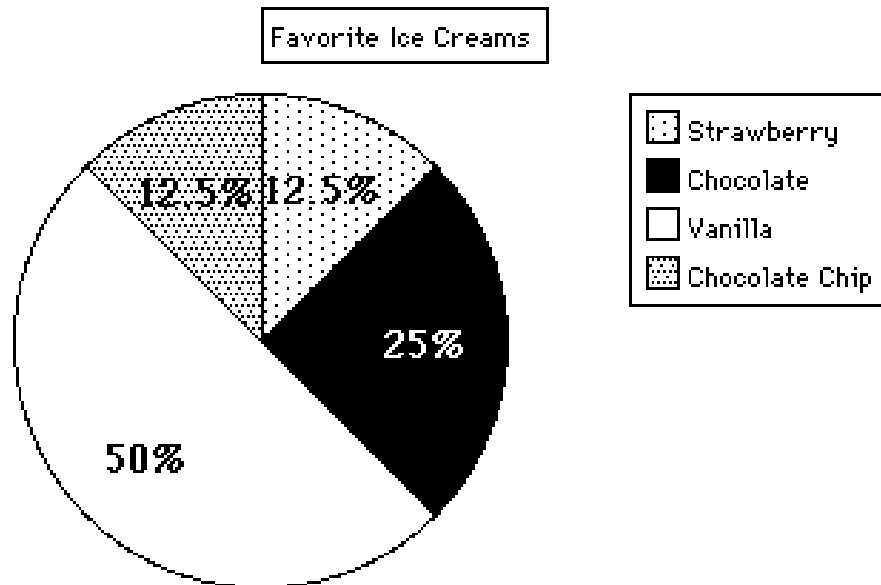Virginia Department of Education 2018

Population of English Speaking People

1. Looking at the graph, can you tell what is the largest country? How do you know that?
2. What is the second largest country?
3. Can you guess a fractional amount of the USA? Is it larger than half, how do you know?
4. How are circle graphs and fractions related?

FAVORITE ICE CREAM

Flavor	Number of Students	Fraction
Strawberry	3	3/24 or 1/8
Chocolate	6	6/24 or ¼
Vanilla	12	12/24 or ½
Chocolate Chip	3	3/24 or 1/8
Total	24	24/24 or 1

Favorite Ice Creams

12.5% 12.5%

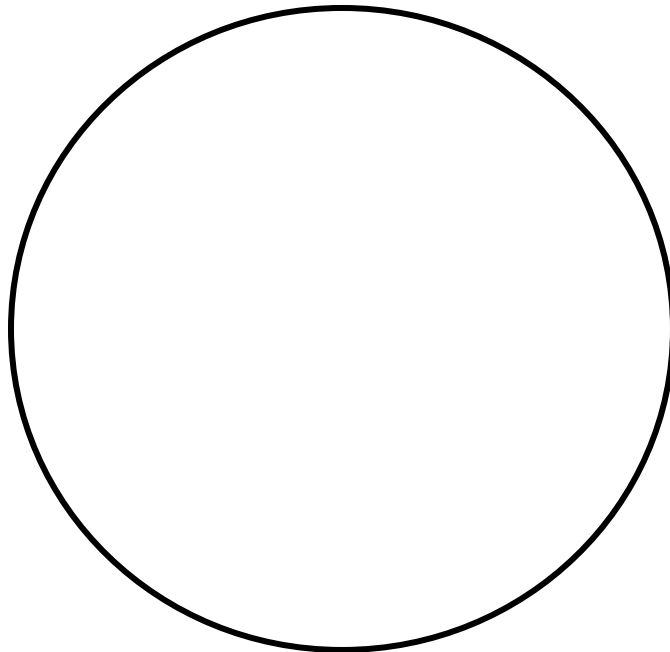25%

50%

☷ Strawberry
■ Chocolate
☐ Vanilla
☷ Chocolate Chip

Favorite Amusement Park Rides

Use the information in the chart to make a circle graph of the favorite amusement park rides of the students surveyed.

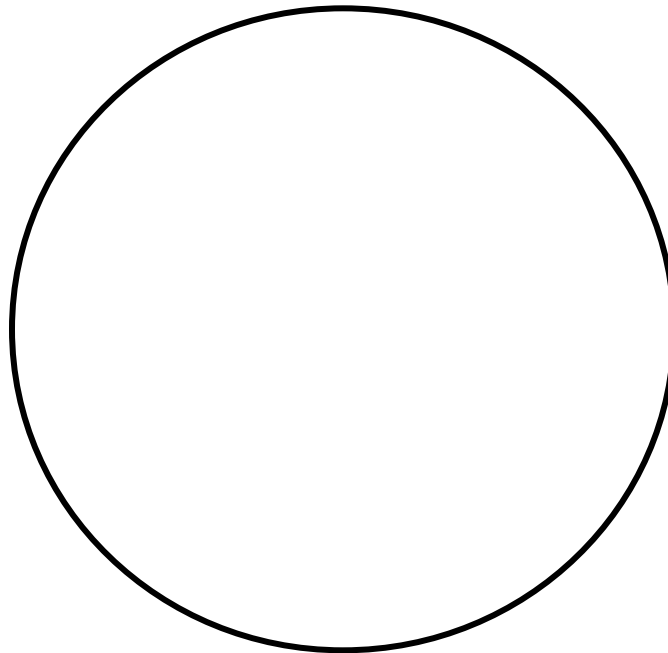| Favorite Ride	Number of students	Fraction
Sea Monster	16	
Twizzler	12	
Super Spin	8	
Water Log	6	
Wall Climber	6	
Total		

Circle Graph

Explain what the graph tells you about the students' preferences for the amusement park rides?

Favorite Chocolate Treat

Use the information in the chart to make a circle graph of the favorite chocolate treat of the students surveyed.

Favorite Chocolate Treat	Number of Students	Fraction
Chocolate Cake	6	
Chocolate Ice Cream	12	
Chocolate Chip Cookie	20	
Chocolate Candy	16	
Chocolate Milk	6	
Total		

Circle Graph

Explain what the graph tells you about the students' preferences for chocolate treats?