

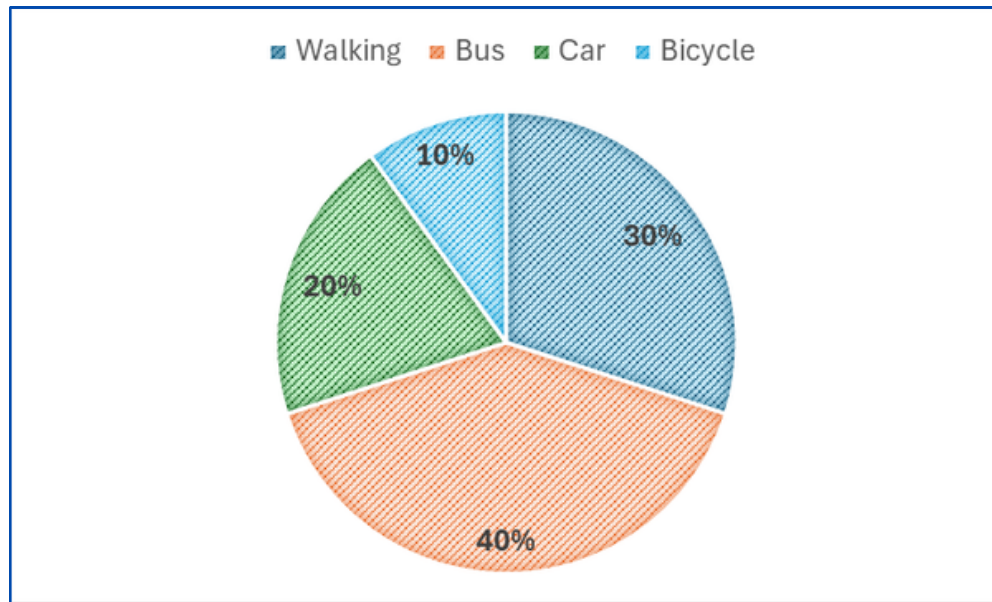
Name:

Date:

Understanding Transportation with Pie Graphs

Part 1: Reading the Pie Graph

Instruction: The pie chart shows the different types of transportation used by students to get to school. Using the pie chart, answer the following questions.



1. What is the most common type of transportation used by students to get to school? _____
2. Which type of transportation is the least common? _____
3. How many students out of 100 use a bus to get to school? _____
4. If 200 students were surveyed, how many of them walk to school? _____
5. What fraction of students use car to get to school? Answer should be in its simplest form. _____
6. If there are 150 students in the school, how many of them use a bicycle to get to school? Show your calculation.

7. Write the fraction of students who use a bicycle to get to school as a percentage.

8. If the number of students taking the bus doubles, what fraction and percentage of the total students now take the bus? Assume the total number of students remains 100 for simplicity.

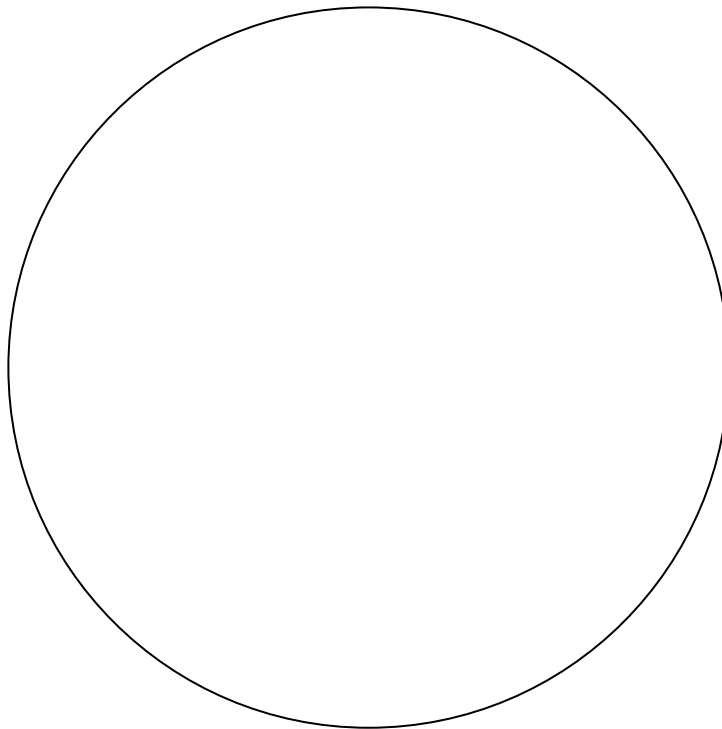
Part 2: Real-World Application

Scenario: A city wants to promote more eco-friendly transportation methods for students.

Instructions: Use the given data and your understanding of percentages and fractions to suggest which type of transportation the city should focus on promoting more. Justify your answer with calculations.

Questions:

- If the city wants to reduce the number of students being driven by car to less than 10%, by how much should the number of students using eco-friendly options (walking, bus, bicycle) increase? Assume the total number of students is 100 for simplicity.
- Create your own pie graph showing the new distribution if the number of students who walk increases to 50%, bus stays the same, and bicycle usage doubles. What fraction and percentage of students now use each type of transportation?
- Draw a new pie graph below using the updated percentages.



Extension Activity: In groups, create a survey for your class to find out how your classmates get to school. Collect the data, calculate the percentages, and create a pie graph. Present your findings to the class.