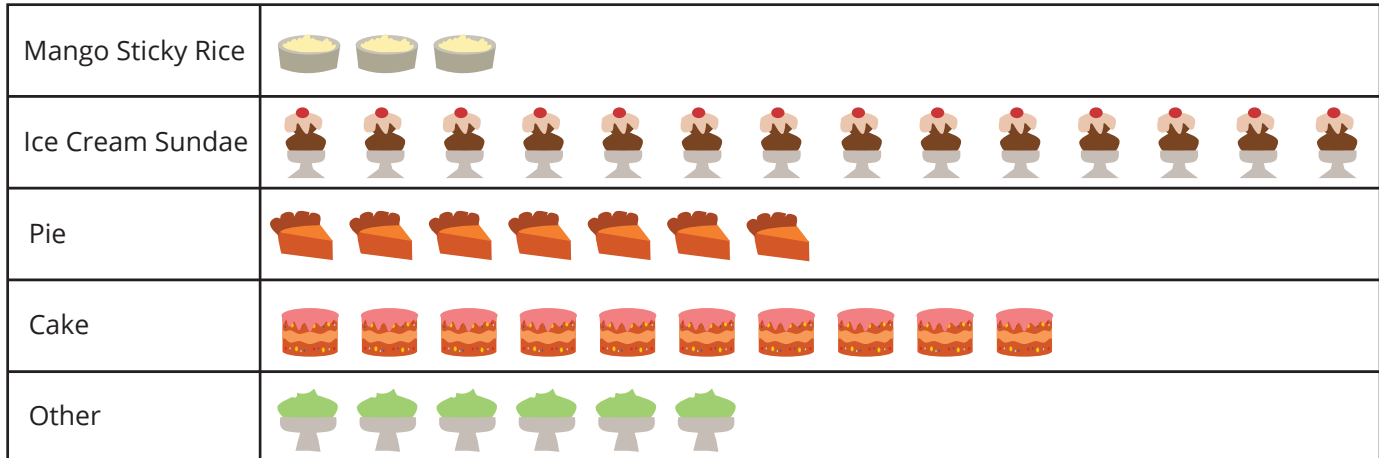# Word Problems: Interpreting Picture Graphs

Name_____   Date_____

Use the picture graph to answer the questions.

Favorite Desserts in Mr. Cravinsweet's 3rd Grade Class

Mango Sticky Rice	🥮🥮🥮
Ice Cream Sundae	🍨🍨🍨🍨🍨🍨🍨🍨🍨🍨🍨🍨🍨🍨
Pie	🥧🥧🥧🥧🥧🥧🥧
Cake	🍰🍰🍰🍰🍰🍰🍰🍰🍰
Other	🥦🥦🥦🥦🥦🥦

Answers

1. If all students in the class voted, how many students are there in the class? _____40_____

2. What is the most popular favorite dessert? _Ice cream sundae_

3. How many more people favor ice cream sundae over mango sticky rice? _____11_____

4. Think about these questions and write your predictions.

a. If another category was added to the survey, how do you think the graph would change?

   Sample responses: Some of the votes would move to the new category. It depends on the category.

b. How do you think the graph would change if the new category was dried fig nuggets with toasted mung beans?

   Sample response: That new category would have zero votes and the rest would stay the same.

c. How about if the new category was freshly baked cookies and milk? Explain your reasoning.

   Some of the votes from other desserts would move to the new category because some kids will probably prefer the cookies.

5. In the graph, each symbol represents one student's vote. If each symbol represented TWO students' votes, how would that change the graph?

The "bars" of symbols would be shorter.
_____

6. How could the vote of ONE student be represented if each symbol represents two votes?

Draw half of the symbol.
_____

7. When making a picture graph, why is it important to have each of the symbols the same size?

Because you sort of measure the height of the bar to get an overall idea and if one symbol was bigger than another it would make it seem like there were more votes for that category.

8. If you were going to do a follow-up survey, what question might you ask to get more information about favorite desserts?

Sample responses:
What desserts are represented in the "other" category?
What kind of ice cream sundae is the most popular?
What kind of cake is the most popular?
How many people know what mango sticky rice is?

9. Write two conclusions you can make from this graph.

a. Sample responses:
Ice cream sundaes and cake are the most popular desserts.

b. Not many students prefer mango sticky rice over the other options.
_____