Merit Tutoring

Year 2 Mathematics

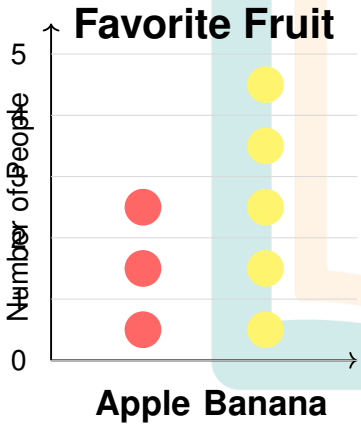
Picture Graphs - Worksheet 51

Reading Picture Graphs

Name: _____ **Date:** _____

Section 1: How Many? (Fluency)

Look at this picture graph showing favorite fruits. Each circle = 1 person.



Question 1: How many people like Apples?

Answer: _____ people

Question 2: How many people like Bananas?

Answer: _____ people

Question 3: How many circles are in the Apple column?

Answer: _____ circles

Question 4: What does each circle represent?

Answer: Each circle = _____

Question 5: True or False: The taller the column, the more people voted for that fruit.

Circle your answer: TRUE FALSE

Question 6: Which column has more circles?

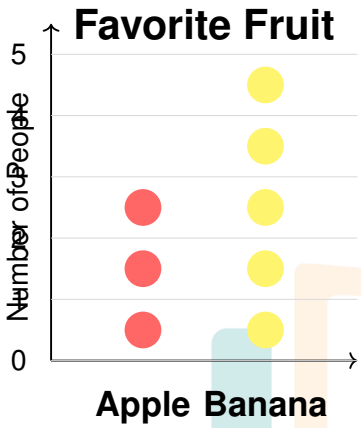
Answer: _____

Graph Greatness Champion!

Why did the picture go to jail? Because it was FRAMED!

Section 2: Most and Least (Reasoning)

Use the Favorite Fruit graph from Section 1 to answer these questions.



Question 7: Which fruit is the MOST popular? (Has the tallest column)

Answer: _____

Question 8: Which fruit is the LEAST popular? (Has the shortest column)

Answer: _____

Question 9: How can you tell which is more popular by looking at the graph?

Answer: The taller column means _____

Question 10: If we added one more circle to the Apple column, how many would there be?

Answer: _____ circles

Question 11: Circle the correct word: Bananas are (MORE / LESS) popular than Apples.

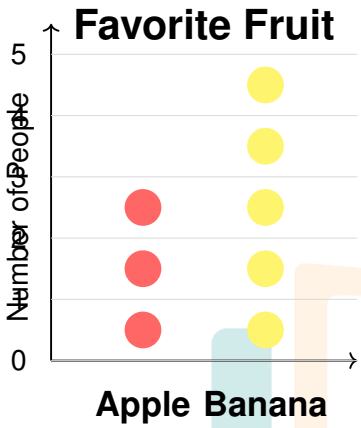
Question 12: True or False: Apple has fewer votes than Banana.
Circle your answer: TRUE FALSE

Picture Perfect Pencil!

What did the graph say to the data? "You make me look GOOD!"

Section 3: Comparing Data Challenge

Use the Favorite Fruit graph to solve these problems.



Question 13: How many MORE people like Bananas than Apples?
Hint: Subtract the smaller number from the bigger number.

Answer: _____ more people

Question 14: How many people voted altogether?
Hint: Add both columns together.

Answer: _____ people

Question 15: What is the difference between the Apple and Banana votes?

Answer: _____

Question 16: If 2 more people voted for Apple, would it be equal to Banana?

Answer: _____

Question 17: How many circles would we need to add to make Apple and Banana equal?

Answer: _____ circles

Question 18: True or False: If we count all the circles in both columns, we get the total number of people.

Circle your answer: TRUE FALSE

Data Detective!

Why did the detective love graphs? Because they helped solve the DATA mystery!

Answer Key

Worksheet 51: Reading Picture Graphs

Section 1: How Many?

1. **3 people** (count 3 circles in Apple column)
2. **5 people** (count 5 circles in Banana column)
3. **3 circles** (in Apple column)
4. Each circle = **1 person** (one-to-one correspondence)
5. **TRUE** (taller columns represent more votes)
6. **Banana** (Banana column has 5 circles, Apple has 3)

Section 2: Most and Least

7. **Banana** (tallest column with 5 votes)
8. **Apple** (shortest column with 3 votes)
9. The taller column means **more people voted for it**
10. **4 circles** (3 + 1 = 4)
11. **MORE** (Bananas are MORE popular than Apples)
12. **TRUE** (Apple has 3, Banana has 5; 3 ¡ 5)

Section 3: Comparing Data Challenge

13. **2 more people** (

$$5 - 3 = 2$$

)

14. **8 people** ($3 + 5 = 8$ total votes)
15. **2** (difference is $5 - 3 = 2$)
16. **No** ($3 + 2 = 5$, which equals Banana, but not exceeds; they would be equal)
17. **2 circles** (need to add 2 to Apple to make it equal to Banana's 5)
18. **TRUE** (counting all circles gives the total number of voters)

Merit Tutoring

Year 2 Mathematics

Picture Graphs - Worksheet 52

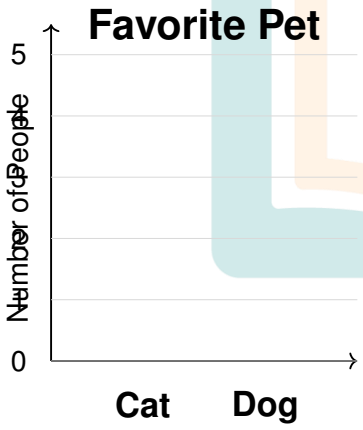
Drawing Picture Graphs

Name: _____ **Date:** _____

Section 1: Draw the Symbols (Fluency)

Draw circles to complete the picture graph.

Question 1: 3 people like Cats. Draw 3 circles in the Cat column.
Question 2: 5 people like Dogs. Draw 5 circles in the Dog column.



Question 3: How many circles did you draw for Cats?

Answer: _____ circles

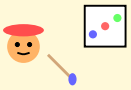
Question 4: How many circles did you draw for Dogs?

Answer: _____ circles

Question 5: Which column is taller?

Answer: _____

Question 6: True or False: Each circle represents 1 person.
Circle your answer: TRUE FALSE



Creative Graph Artist!

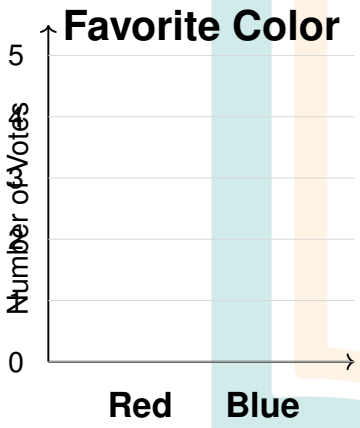
Why did the artist love graphs? Because they could DRAW conclusions!

Section 2: From Table to Graph (Reasoning)

Look at this data table. Use it to complete the picture graph below.

Color	Number of Votes
Red	4
Blue	2

Question 7: Complete the picture graph by drawing circles.
Draw 4 circles for Red. Draw 2 circles for Blue.



Question 8: How many circles did you draw for Red?

Answer: _____ circles

Question 9: How many circles did you draw for Blue?

Answer: _____ circles

Question 10: Which color has more votes?

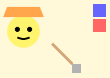
Answer: _____

Question 11: How many more votes does Red have than Blue?

Answer: _____ more votes

Question 12: What is the total number of votes?

Answer: _____ votes



Graph Builder Champion!

Why did the builder love graphs? Because they could BUILD them from tables!

Section 3: Interpreting Your Graph Challenge

Answer these questions about the Favorite Color graph you just drew.

Question 13: If one more person votes for Blue, how many Blue votes will there be in total?

Answer: _____ votes

Question 14: True or False: There are more Red votes than Blue votes.
Circle your answer: TRUE FALSE

Question 15: If 2 people change their vote from Red to Blue, how many would Blue have?

Answer: _____ votes

Question 16: Look at your Pet graph (Cat and Dog). Which pet is more popular?

Answer: _____

Question 17: On your Pet graph, how many people voted altogether?

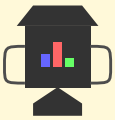
Answer: _____ people

Question 18: Draw your own simple picture graph for "Favorite Season". Ask 5 friends: How many like Summer? How many like Winter?

Question 19: True or False: Picture graphs help us see information quickly.
Circle your answer: TRUE FALSE

Question 20: What does each symbol (circle) on a picture graph represent?

Answer: Each symbol represents _____



Picture Graph Champion!

Why did graphs win awards? Because they could show data in PICTURE-perfect ways!

Answer Key

Worksheet 52: Drawing Picture Graphs

Section 1: Draw the Symbols

1. & 2. Students should draw 3 circles in the Cat column and 5 circles in the Dog column
2. **3 circles** (drawn for Cats)
3. **5 circles** (drawn for Dogs)
4. **Dog** (Dog column is taller with 5 circles)
5. **TRUE** (each circle = 1 person in picture graphs)

Section 2: From Table to Graph

7. Students should draw 4 circles for Red and 2 circles for Blue
8. **4 circles** (for Red, as per table)
9. **2 circles** (for Blue, as per table)
10. **Red** (Red has 4 votes, Blue has 2)
11. **2 more votes** (
$$4 - 2 = 2$$
)
12. **6 votes** (
$$4 + 2 = 6$$
total)

Section 3: Interpreting Your Graph Challenge

13. **3 votes** (
$$2 + 1 = 3$$
for Blue)
14. **TRUE** (Red has 4, Blue has 2;
$$4 > 2$$
)
15. **4 votes** (Blue starts with 2, gains 2:
$$2 + 2 = 4$$
)
16. **Dog** (Dog has 5, Cat has 3)
17. **8 people** (
$$3 + 5 = 8$$
from Cat and Dog graph)
18. Student's own picture graph showing data they collected (check for proper labels, correct number of symbols)
19. **TRUE** (picture graphs provide visual representation of data)
20. Each symbol represents **1 item** / **1 person** / **1 vote** (one-to-one correspondence)

Fantastic Work, Graph Experts!

You can read, draw, and interpret picture graphs!

