LESSON MAKER PRO

Circle Graph Detectives

Read sectors, compare parts, and use totals.

GRADE 6 · 6.PS.1.e

6.PS.1.e "Analyze data represented in a circle graph by making observations and drawing conclusions."

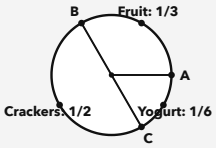
NAME _____ DATE _____

READ THE WHOLE CIRCLE

A full circle is one whole, or 100%. Use a sector's fraction or percent to find its part of a total. Compare sector sizes to make conclusions about the data.

WORKED EXAMPLE

The circle graph shows snack choices of 36 students. How many students chose Fruit?



1. The Fruit sector is 1/3 of the circle.
2. Find 1/3 of 36.
3. 36 / 3 = 12.

Answer: 12 students

PRACTICE 4 problems

1 A circle graph has a 27% sector for skateboarding. What percent chose something else?

ANSWER _____

2 In a circle graph of 64 students, the robotics sector is 25%. How many students chose robotics?

ANSWER _____

3 A circle graph has a 2/5 sector for comics. If 40 students were surveyed, how many chose comics?

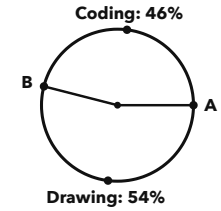
ANSWER _____

4 A circle graph shows Book Club, 45%; Art, 35%; and Chess, 20%. Which choice is smallest?

ANSWER _____

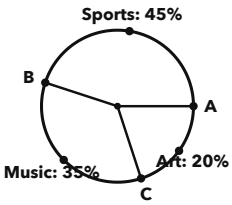
APPLY IT Show your work

1 The circle graph shows how 50 students spend free time. How many chose Coding?



ANSWER _____

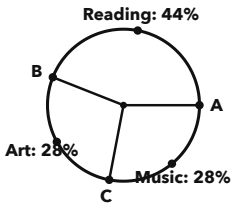
2 A school club survey includes 200 students. Which choice is most popular? How many more students chose it than the least popular choice?



ANSWER _____

CHALLENGE One step up

The graph shows 150 survey votes. Maya says, "Reading got 24 more votes than Art." Is Maya correct? Explain.



WORK SPACE AND ANSWER

ANSWER KEY

Circle Graph Detectives

GRADE 6 · 6.PS.1.e

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A circle graph has a 27% sector for skateboarding. What percent chose something else?	**73%**
2	In a circle graph of 64 students, the robotics sector is 25%. How many students chose robotics?	**16 students**
3	A circle graph has a 2/5 sector for comics. If 40 students were surveyed, how many chose comics?	**16 students**
4	A circle graph shows Book Club, 45%; Art, 35%; and Chess, 20%. Which choice is smallest?	**Chess**

PART 2 · APPLY IT

1. **23 students** Find 46% of 50. Since 46/100 of 50 is 23, 23 students chose Coding.
2. **Sports; 50 more students** Sports is the largest sector at 45%, and Art is the smallest at 20%. They represent 90 and 40 students, so the difference is 50.

CHALLENGE

Yes. Reading is 66 votes and Art is 42 votes. 66 - 42 = 24.

Accept equivalent calculations and clear explanations that use the sector percent and total. For the challenge, students must state that Maya is correct and show or describe the difference of 24 votes.