LESSON MAKER PRO

Time and Data Detectives

Read clocks, measure objects, and compare data.

GRADE 4 · 4.MDR.6

4.MDR.6 "Measure time and objects that exist in the world to solve real-life, mathematical problems and analyze graphical displays of data to answer relevant questions."

NAME _____ DATE _____

READ, MEASURE, COMPARE

Read the minute hand to find the minutes and the hour hand to find the hour. To find elapsed time, count forward from the start time to the end time. Use the labels and numbers on a graph to compare data.

WORKED EXAMPLE

What time does the clock show?



1. The minute hand points to 5, so it is 25 minutes past the hour.
2. The hour hand is between 3 and 4, so the hour is 3.
3. Write 3:25.

Answer: 3:25

PRACTICE 6 problems

1 What time does the clock show?



ANSWER _____

2 What time does the clock show?



ANSWER _____

3 A game begins at 8:20 a.m. and ends at 8:50 a.m. How long does the game last?

ANSWER _____

4 A ribbon is 2 meters long. How many centimeters long is the ribbon?

ANSWER _____

5 A reading timer begins at 12:10 p.m. and stops at 12:55 p.m. How many minutes does the timer run?

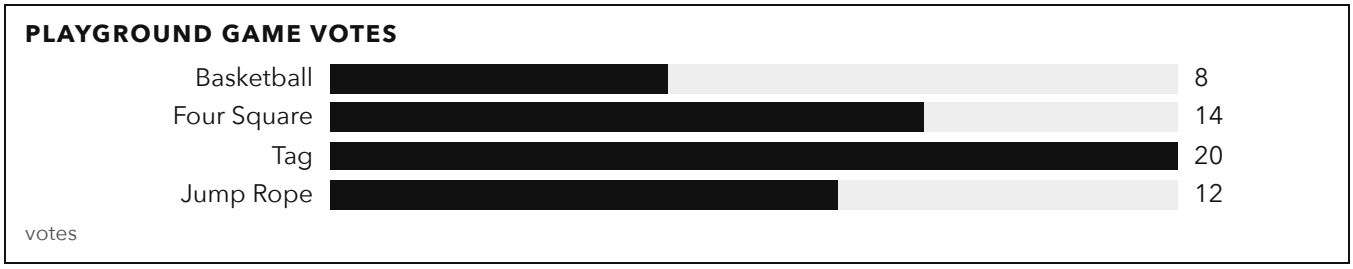
ANSWER _____

6 Each bag of soil has a mass of 500 grams. Four bags have a mass of how many kilograms?

ANSWER _____

APPLY IT Show your work

1 Students voted for a playground game. The bar graph shows the votes. How many more votes did Tag receive than Four Square?



ANSWER _____

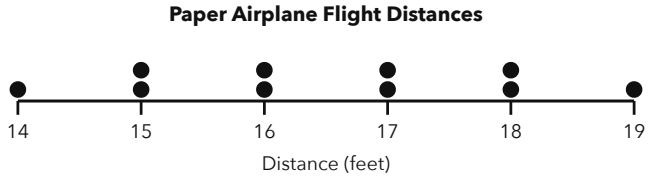
2 The robotics club starts building at 1:20 p.m. and stops at 2:50 p.m. How long does the club build?

WORK SPACE

ANSWER _____

CHALLENGE One step up

The dot plot shows paper airplane flight distances. What is the difference between the longest and shortest flights? How many planes flew farther than 16 feet? Explain your reasoning.



WORK SPACE AND ANSWER

ANSWER KEY

Time and Data Detectives

GRADE 4 · 4.MDR.6

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What time does the clock show?	**7:45**
2	What time does the clock show?	**11:05**
3	A game begins at 8:20 a.m. and ends at 8:50 a.m. How long does the game last?	**30 minutes**
4	A ribbon is 2 meters long. How many centimeters long is the ribbon?	**200 centimeters**
5	A reading timer begins at 12:10 p.m. and stops at 12:55 p.m. How many minutes does the timer run?	**45 minutes**
6	Each bag of soil has a mass of 500 grams. Four bags have a mass of how many kilograms?	**2 kilograms**

PART 2 · APPLY IT

1. **6 more votes** Tag has 20 votes and Four Square has 14 votes. Subtract 14 from 20 to get 6.
2. **1 hour 30 minutes** Count from 1:20 p.m. to 2:20 p.m., then from 2:20 p.m. to 2:50 p.m. The total is 1 hour 30 minutes.

CHALLENGE

5 feet; 5 planes. The longest flight is 19 feet and the shortest is 14 feet, so the difference is 5 feet. There are 5 data points above 16 feet.

Accept equivalent unit abbreviations, such as cm, m, g, and kg. For the challenge, accept a correct explanation that identifies 19 minus 14 and counts the five points at 17, 18, and 19 feet.