

Measure It Out

Use measurements and data to solve real-life problems.

GRADE 3 • 3.MDR.5

3.MDR.5 "Solve real-life, mathematical problems involving length, liquid volume, mass, and time and analyze graphical displays of data to answer relevant questions."

NAME _____

DATE _____

CHOOSE THE OPERATION

Read the unit, such as inches, cups, grams, or minutes. Use the measurements or data to decide whether to add, subtract, multiply, or divide, then write the answer with the correct unit.

WORKED EXAMPLE

A bar graph shows 14 blue birds and 21 red birds at a feeder. How many more red birds are there than blue birds?

1. Find the larger number, 21.
2. Subtract: $21 - 14 = 7$.
3. Write the difference: 7 birds.

Answer: 7 birds

PRACTICE 6 problems

- 1** A ribbon is 36 inches long. Mia cuts off 12 inches. How many inches of ribbon are left?

ANSWER _____

- 2** A pitcher holds 8 cups of juice. You pour 3 cups into glasses. How many cups of juice are left?

ANSWER _____

- 3** One bag of pet food has a mass of 450 grams. Another bag has a mass of 230 grams. What is the total mass?

ANSWER _____

- 4** A movie starts at 2:15 and ends at 3:05. How long is the movie?

ANSWER _____

- 5** A bar graph shows 16 laps run on Monday and 26 laps run on Tuesday. How many more laps were run on Tuesday?

ANSWER _____

- 6** Picture graph: Each ★ stands for 4 cans. Class A: ★★★★★. Class B: ★★★. How many cans did both classes collect?

ANSWER _____

APPLY IT Show your work

- 1** At the school garden, a bar graph shows 12 carrots, 15 peas, and 9 beans. The garden club puts all the vegetables into bags that hold 3 vegetables each. How many full bags can the club fill?

WORK SPACE

ANSWER _____

- 2** Noah starts drawing a comic at 10:25. He draws for 35 minutes, takes a 15-minute break, and then draws for 25 more minutes. What time does Noah finish?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A pet shelter has 18 cups of water in a large bowl. Four puppies each drink 3 cups of water. Then a worker adds 5 cups of water. How many cups of water are in the bowl now?

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A ribbon is 36 inches long. Mia cuts off 12 inches. How many inches of ribbon are left?	24 inches
2	A pitcher holds 8 cups of juice. You pour 3 cups into glasses. How many cups of juice are left?	5 cups
3	One bag of pet food has a mass of 450 grams. Another bag has a mass of 230 grams. What is the total mass?	680 grams
4	A movie starts at 2:15 and ends at 3:05. How long is the movie?	50 minutes
5	A bar graph shows 16 laps run on Monday and 26 laps run on Tuesday. How many more laps were run on Tuesday?	10 laps
6	Picture graph: Each ★ stands for 4 cans. Class A: ★★★★★. Class B: ★★★. How many cans did both classes collect?	32 cans

PART 2 • APPLY IT

- 12 bags** Add the vegetables: $12 + 15 + 9 = 36$. Divide 36 by 3 to find 12 full bags.
- 11:40** The drawing time and break take $35 + 15 + 25 = 75$ minutes. Add 75 minutes to 10:25 to get 11:40.

CHALLENGE**11 cups**

Accept correct answers with equivalent unit wording, such as "24 in." for "24 inches." Require students to include units for measurement answers and to show the correct total when a problem has more than one step.