

# Measure Mission

*Convert units, find time, and solve measurement problems.*

**GRADE 4 • 4.MDR.6.1**

**4.MDR.6.1** "Use the four operations to solve problems involving elapsed time to the nearest minute, intervals of time, metric measurements of liquid volumes, lengths, distances, and masses of objects..."

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**MATCH THE UNITS**

To change from a larger metric unit to a smaller unit, use the number of smaller units in 1 larger unit and multiply. To change from a smaller unit to a larger unit, make equal groups. For elapsed time, count forward from the start time to the end time.

**WORKED EXAMPLE**

Write 4 m as centimeters.

1.  $1 \text{ m} = 100 \text{ cm}$ .

2. 4 groups of  $100 \text{ cm} = 400 \text{ cm}$ .

3. So,  $4 \text{ m} = 400 \text{ cm}$ .

**Answer: 400 cm**

**PRACTICE** 6 problems

**1** Write 3 m as centimeters.

**ANSWER** \_\_\_\_\_

**2** Write 2 L 500 mL as milliliters.

**ANSWER** \_\_\_\_\_

**3** A bag has 5 kg 250 g of soil. Another bag has 2 kg 500 g of soil. What is the total mass?

**ANSWER** \_\_\_\_\_

**4** A movie starts at 2:18 PM and ends at 3:05 PM. How long is the movie?

**ANSWER** \_\_\_\_\_

**5** Find the sum:  $\frac{2}{8} \text{ L} + \frac{3}{8} \text{ L}$ .

**ANSWER** \_\_\_\_\_

**6** Write 900 cm as meters.

**ANSWER** \_\_\_\_\_

## APPLY IT Show your work

- 1** For a weekend bike scavenger hunt, Lina rides 1 km 300 m to the first clue and 2 km 500 m to the next clue. How far does she ride altogether?

WORK SPACE

ANSWER \_\_\_\_\_

- 2** A gaming club begins its tournament at 1:35 PM and ends at 3:05 PM. How long does the tournament last?

WORK SPACE

ANSWER \_\_\_\_\_

## CHALLENGE One step up

### CHALLENGE

A drone flies 3 km 600 m in its first test and 1 km 850 m in its second test. Its battery can power it for 6 km. How many meters can the drone still fly?

---

---

## PART 1 • PRACTICE

| # | PROBLEM                                                                                   | ANSWER                            |
|---|-------------------------------------------------------------------------------------------|-----------------------------------|
| 1 | Write 3 m as centimeters.                                                                 | <b>300 cm</b>                     |
| 2 | Write 2 L 500 mL as milliliters.                                                          | <b>2,500 mL</b>                   |
| 3 | A bag has 5 kg 250 g of soil. Another bag has 2 kg 500 g of soil. What is the total mass? | <b>7 kg 750 g</b>                 |
| 4 | A movie starts at 2:18 PM and ends at 3:05 PM. How long is the movie?                     | <b>47 minutes</b>                 |
| 5 | Find the sum: $\frac{2}{8}$ L + $\frac{3}{8}$ L.                                          | <b><math>\frac{5}{8}</math> L</b> |
| 6 | Write 900 cm as meters.                                                                   | <b>9 m</b>                        |

## PART 2 • APPLY IT

- 3 km 800 m** Add the kilometers and meters: 1 km 300 m + 2 km 500 m = 3 km 800 m.
- 1 hour 30 minutes** Count from 1:35 PM to 2:35 PM for 1 hour, then from 2:35 PM to 3:05 PM for 30 minutes.

## CHALLENGE

**550 m**

Accept equivalent correct measurements, such as 7,750 g for the total mass and 3,800 m for the bike distance. For elapsed time, accept 1 hour 30 minutes or 90 minutes.