Unit 8 · Time, Liquid Volume, and Mass Cheat Sheet

Unit 8 focus: telling time to the minute and elapsed time

1 Big Idea

Read the hour hand first, then count the minute hand by 5s and 1s. To find elapsed time, jump on a number line to the next hour, then the rest.

2 Important Vocabulary

hour hand	The short hand on a clock; it shows the hour.	between 3 and 4 means after 3
minute hand	The long hand on a clock; it shows the minutes.	on the 6 means 30 minutes
minute	A unit of time. 60 minutes = 1 hour.	a song lasts about 3 minutes
elapsed time	How much time passes from the start to the end.	2:15 to 2:50 is 35 minutes

3 How It Works

Soccer starts at 3:45 and ends at 4:30. How long is it?

Example: Jump on a time line
3:45 to 4:00: 15 minutes
4:00 to 4:30: 30 minutes
Add: 15 + 30 = 45

Answer: 45 minutes

4 Visual Model



3:45. The hour hand is past the 3. The minute hand is on the 9: 9 × 5 = 45 minutes.

5 ★ Remember This · Watch Out!

★ Remember this

- 1 hour = 60 minutes (not 100).
- Each number on the clock is 5 minutes.

⚠ Watch out!

- **Reading the next hour too soon:** at 2:55 the hour hand is almost at 3, but it is still 2 o'clock
- **Subtracting times like numbers:** 4:10 − 3:50 is 20 minutes, not 60

6 Try It!

1. Start 1:20, 35 minutes later?
   Answer: 1:55
2. 9:40 to 10:15 is how long?
   Answer: 35 minutes

Answers are printed upside down. Turn the page to check!

Unit 8 · Time, Liquid Volume, and Mass Cheat Sheet

More practice: liquid volume in liters and mass in grams and kilograms

1 Big Idea

Measure liquid volume in liters. Measure mass in grams (light things) and kilograms (heavy things). Read a scale by finding what one mark is worth.

2 Important Vocabulary

liquid volume	How much liquid a container holds.	a bucket holds about 10 liters
liter	A metric unit for liquid volume.	a large water bottle holds about 1 liter
gram	A small metric unit of mass.	a paper clip is about 1 gram
kilogram	A larger metric unit of mass.	a dictionary is about 1 kilogram

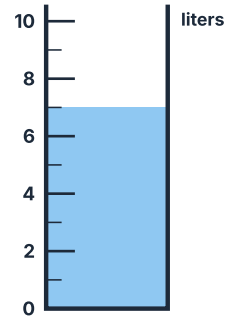
3 How It Works

5 jugs each hold 4 liters. How many liters in all?

Example: Equal groups
Equation: 5 × 4 = n
Solve: n = 20

Answer: 20 liters

4 Visual Model



Each mark is 1 liter. The water is at 7 liters.

5 ★ Remember This · Watch Out!

★ Remember this

- A paper clip ≈ 1 gram. A big book ≈ 1 kilogram.
- Use the same units before you add or subtract.

⚠ Watch out!

- **Each mark is 1?:** check the scale: marks may count by 2s, 5s or 10s
- **Big means heavy?:** size is not mass

6 Try It!

1. A 900-gram bag has 350 grams taken out. How much is left?
   Answer: 550 grams
2. 24 liters into 6 tanks equally?
   Answer: 4 liters each

Answers are printed upside down. Turn the page to check!