



GRADE 3 / WATCH MR DJ SOLVE

**MASS AND LIQUID VOLUME**

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE****3 bottles contain 4 L each. How many liters altogether?**

- 1** Use 3 equal groups of 4 L.
- 2**  $3 \times 4 = 12$ .
- 3** The answer is in liters, not cubic units.

**Answer:** **12****REMEMBER** choose grams, kilograms or liters and solve stories in the same unit.

Read each step and explain why it is valid. The next pages demonstrate the methods in more detail. Then use the large work areas on the numbered practice pages.



GRADE 3 / WORKED METHODS

# MASS AND LIQUID VOLUME

Read a complete example before trying the matching method.

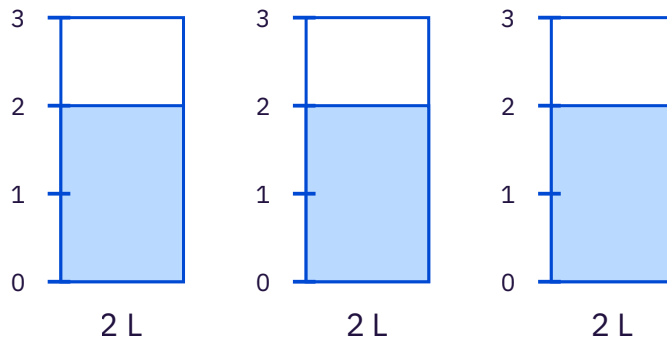


Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

## Equal liquid amounts

### 3 containers of 2 L hold 6 L

1. Read each container's liter scale.
2. There are three equal 2-liter groups.
3.  $3 \times 2 = 6$  liters.



3 equal 2-liter amounts = 6 L



GRADE 3 / WORKED METHODS

## MASS AND LIQUID VOLUME

Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

### Mass left over

$$500 \text{ g} - 175 \text{ g} = 325 \text{ g}$$

1. Both amounts measure mass in grams.
2. Subtract 175 from 500.
3.  $325 + 175 = 500 \text{ g}$  checks the answer.



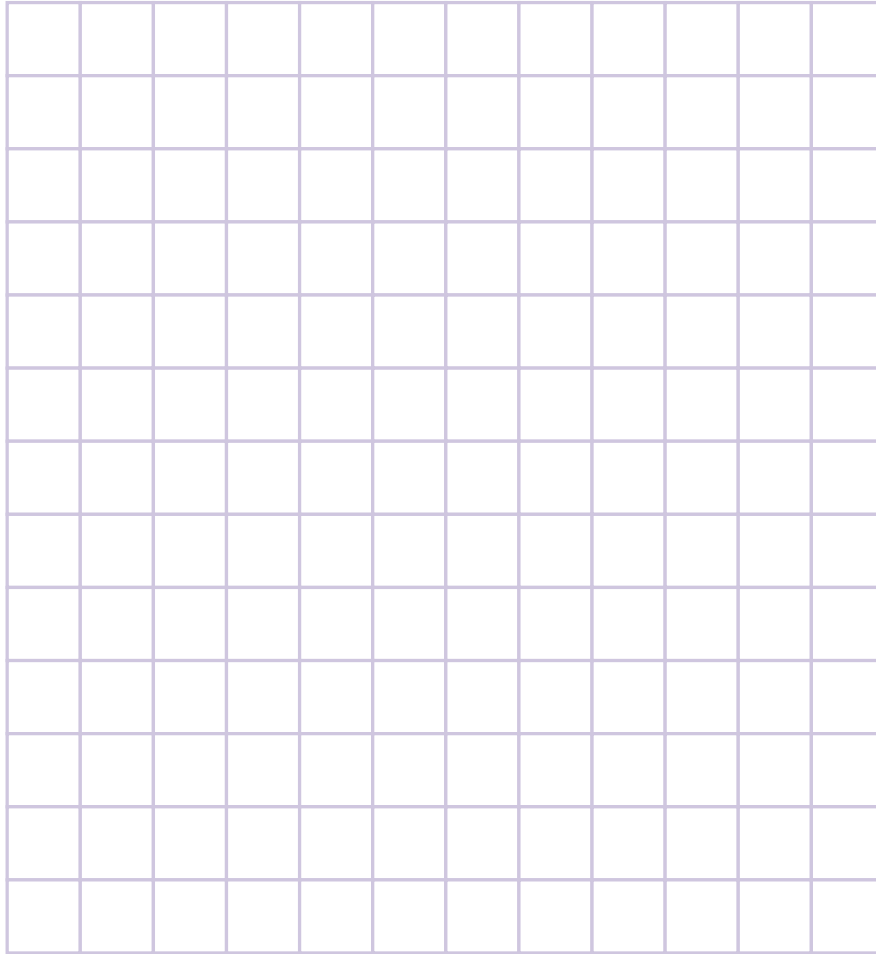
GRADE 3 / MATHEMATICAL WORK TOOL

# MASS AND LIQUID VOLUME

Use labels and a clear scale.



Draw and label a model. Choose what one unit square means.





GRADE 3 / PRACTICE

# MASS AND LIQUID VOLUME

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

◀ Mild

**1. A bag has 300 g of rice. Use 120 g. How much remains?**

My answer / conclusion: \_\_\_\_\_

◀ Mild

**2. 12 kg of fruit are shared equally among 3 crates. Find mass per crate.**

My answer / conclusion: \_\_\_\_\_



Date \_\_\_\_\_

## MASS AND LIQUID VOLUME

A cartoon fox mascot with orange fur, large eyes, and a purple collar, holding a yellow pencil.

Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

**Medium** 3. Join 3 L of juice and 4 L of juice. Find the total.

My answer / conclusion: \_\_\_\_\_

**Medium** 4. Choose a sensible unit for a paper clip: g, kg or L. Explain using a 2-gram estimate.

My answer / conclusion: \_\_\_\_\_



GRADE 3 / PRACTICE

# MASS AND LIQUID VOLUME

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

◀ Medium

**5. Estimates for a classroom bucket are 3 L and 3 g. Which describes liquid volume? How could you check?**

Grid area for student work.

My answer / conclusion: \_\_\_\_\_



GRADE 3 / PRACTICE

## MASS AND LIQUID VOLUME

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔥🔥🔥 Spicy

**6. Digit adds 3 kg and 4 L to get 7 kg. Explain why this answer has no valid meaning.**

Grid area for student work.

My answer / conclusion: \_\_\_\_\_



GRADE 3 / PRACTICE

# MASS AND LIQUID VOLUME

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🌶️🌶️🌶️ Spicy

**7. 3 equal jars hold 4 L each. Explain why multiplying is appropriate without saying one jar is bigger than another.**

Grid area for student work.

My answer / conclusion: \_\_\_\_\_

**GRADE 3 / PRACTICE**

# MASS AND LIQUID VOLUME

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

**Extra Spicy**

**8. Design one addition and one division question with a total of 12 L. Solve and label them.**

My answer / conclusion: \_\_\_\_\_