Mathematics

Density as rate
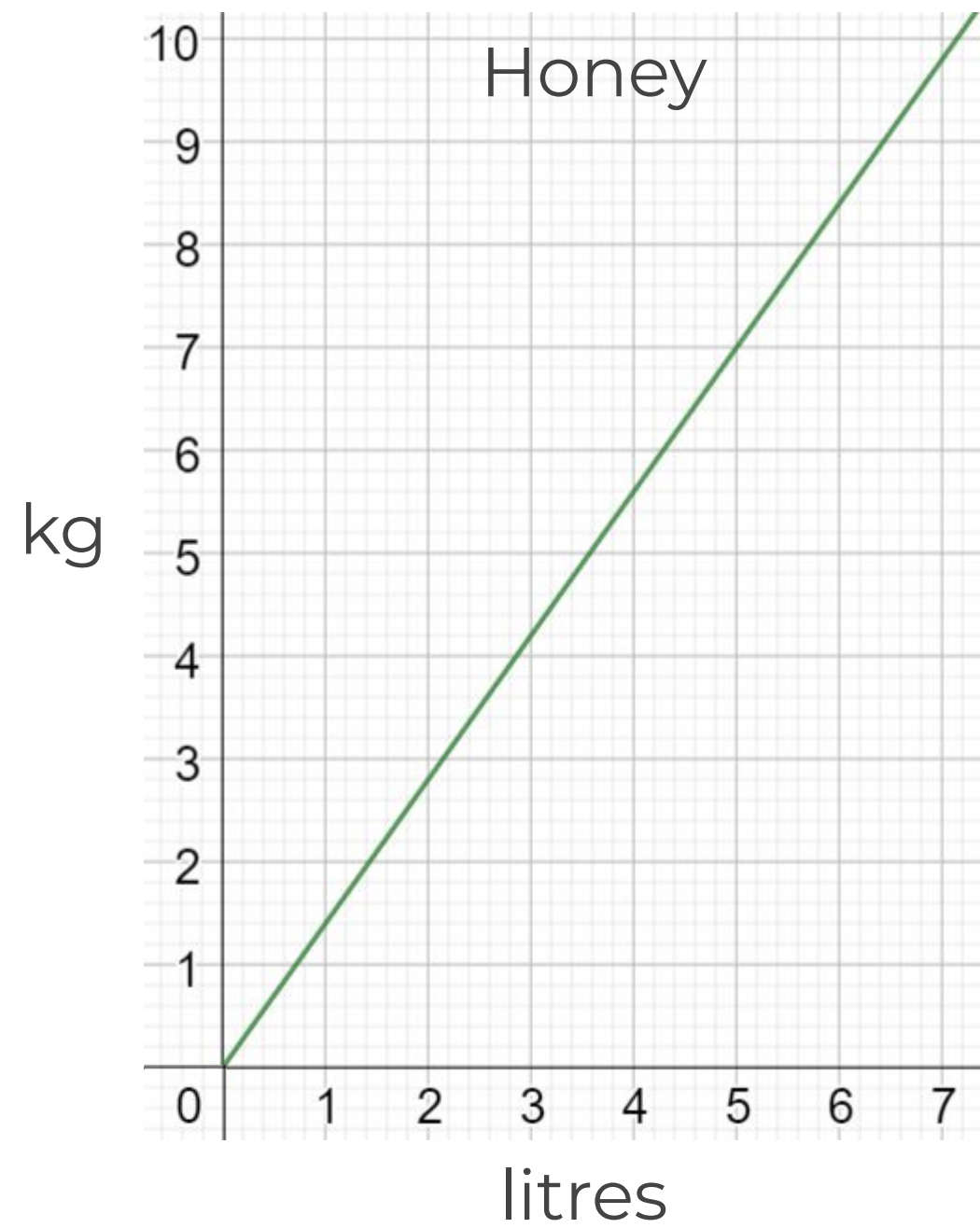# Lesson 4 of 8
Downloadable resource

Miss Kidd-Rossiter

Try this

Honey

kg

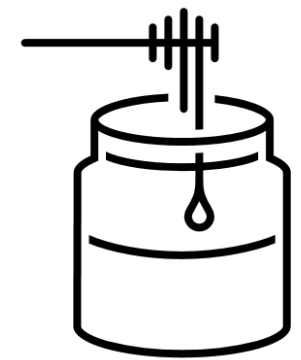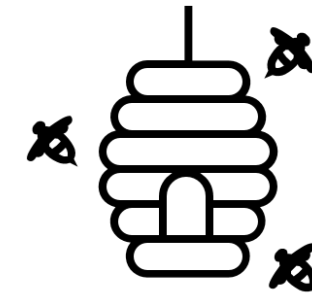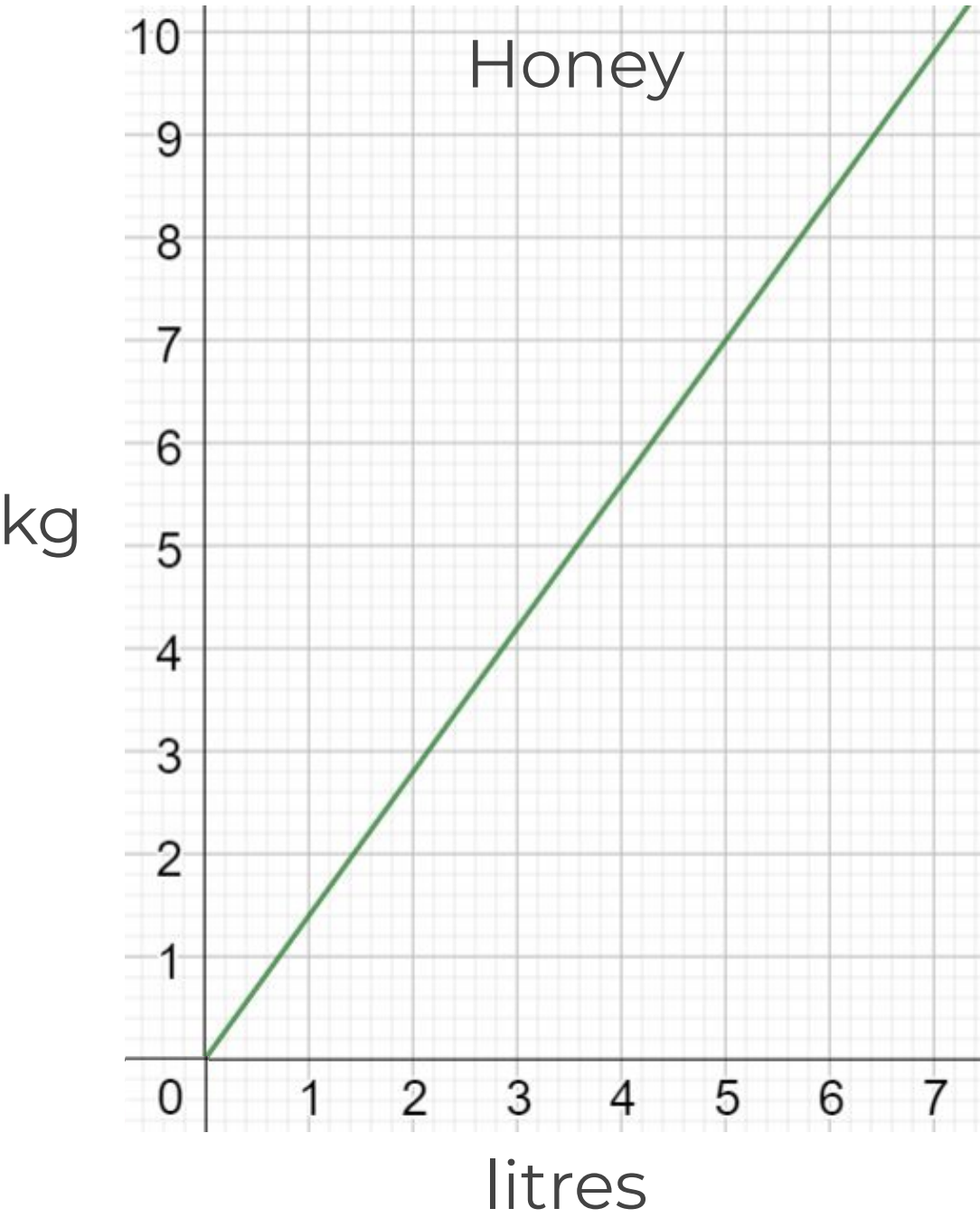litres

What is the graph telling us about honey?

What 'rate' can you see here?

Connect

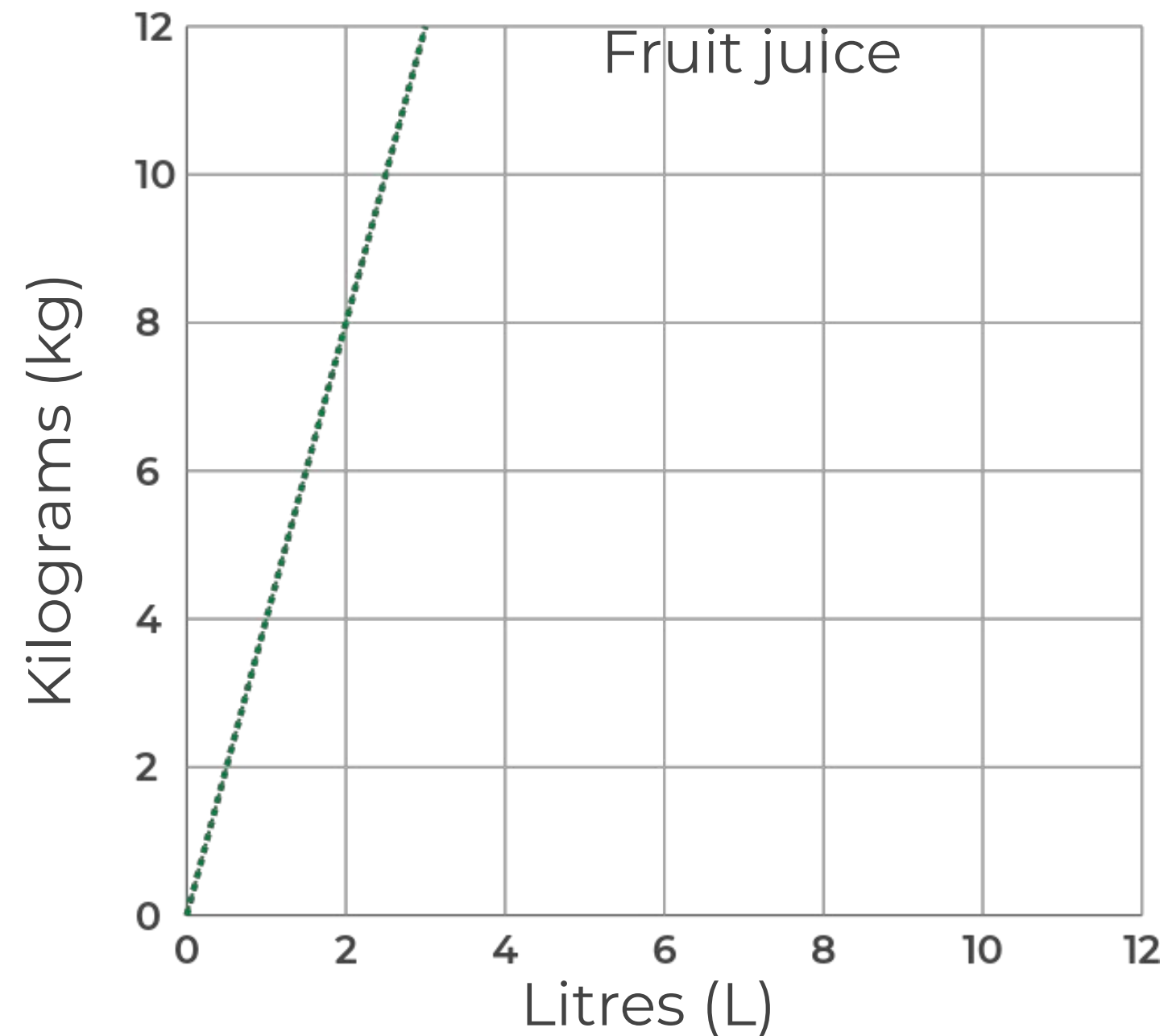Honey

kg

litres

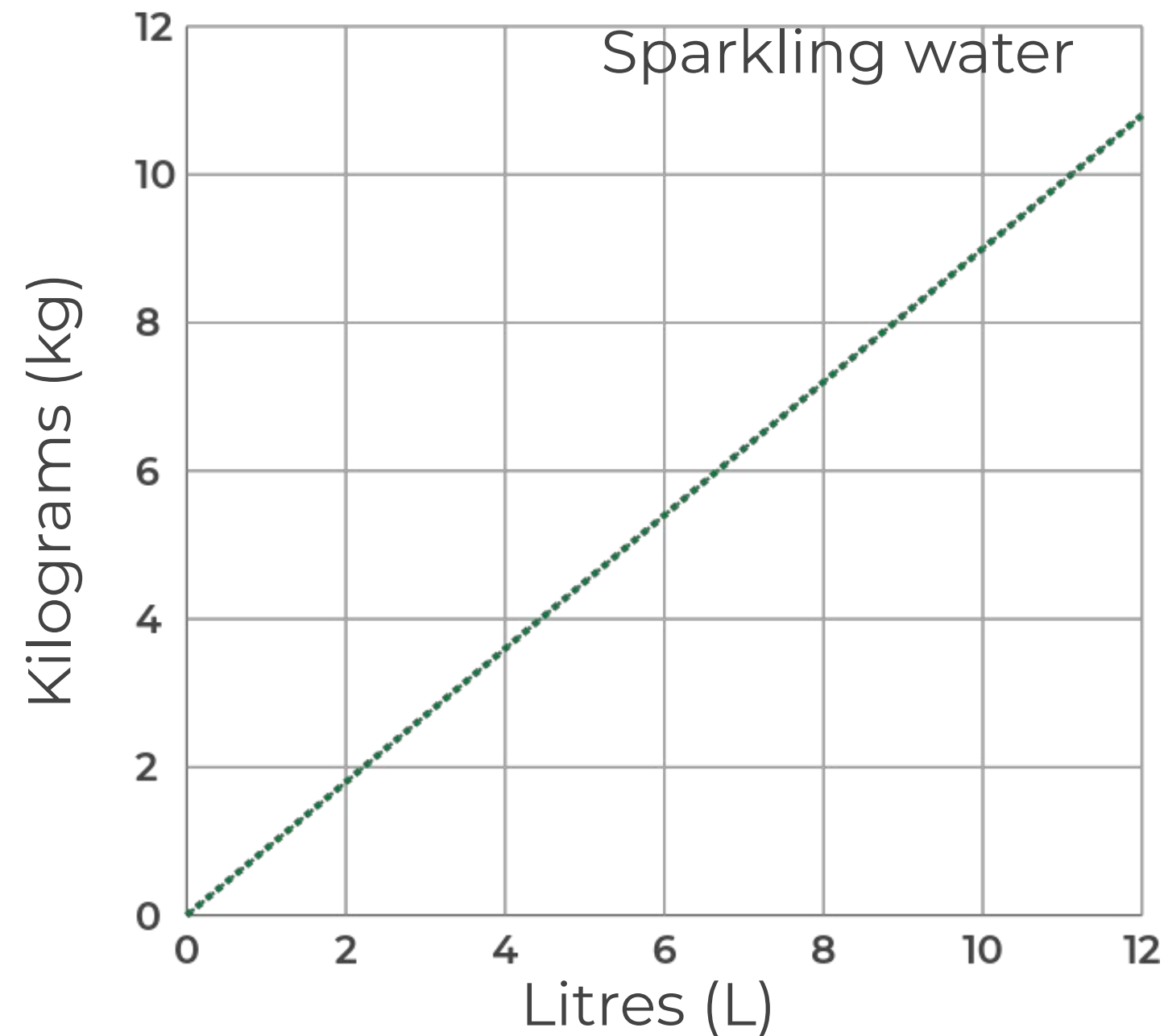| Litres (L)	5	1	
Kilograms (kg)	7		

Independent task

Fruit juice

Kilograms (kg) vs Litres (L)

1. What is the mass of 2 litres of fruit juice?

2. What is the density of the fruit juice?

3. How many litres of fruit juice have a mass of 9kg?

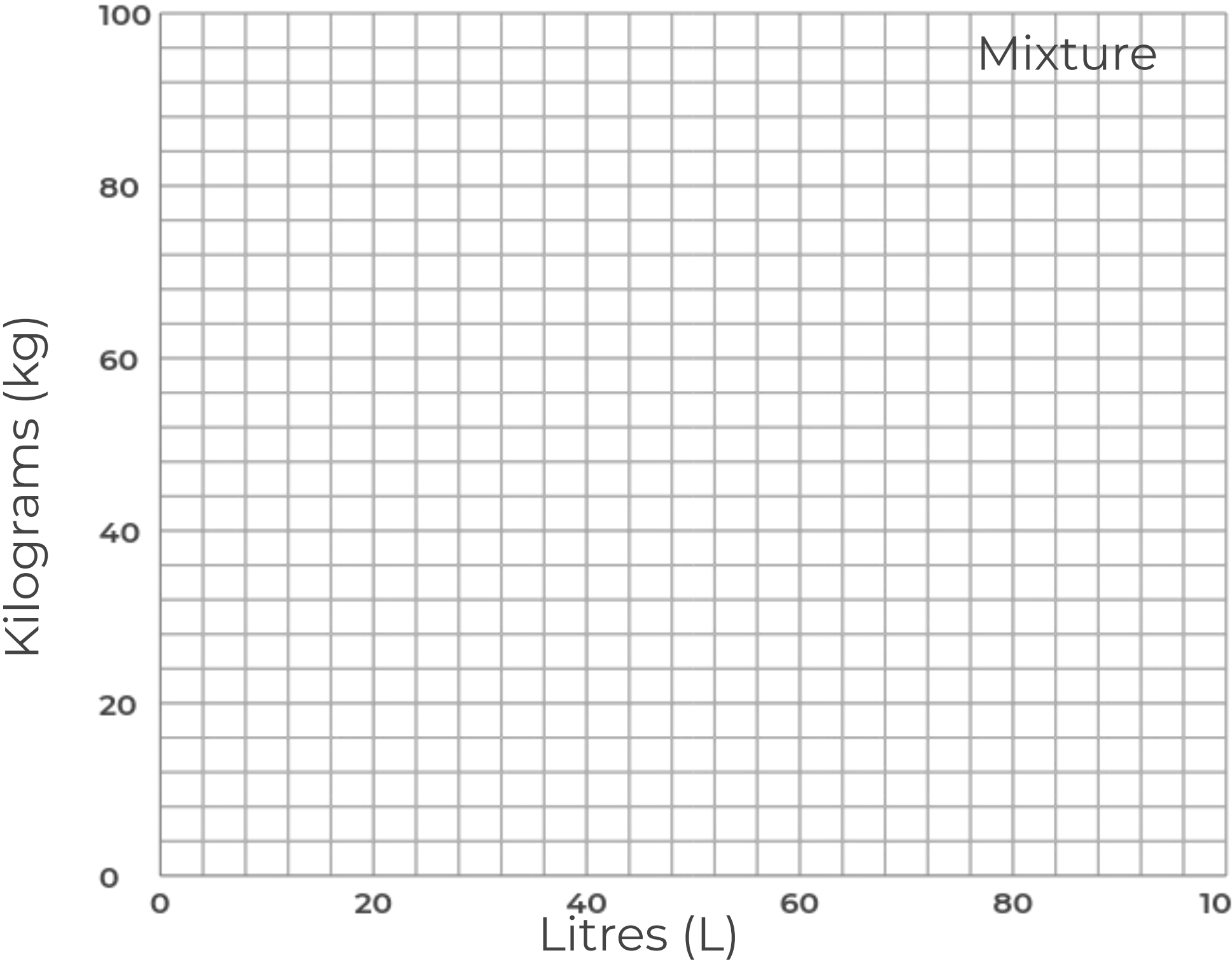4. How many litres of fruit juice have a mass of 50kg?

Independent task

5. Fill in the gaps: _____ litres of sparkling water have a mass of _____kg.

6. What is the density of the sparkling water?

7. How many litres of sparkling water have a mass of 5kg?

8. What is the mass of 200 litres of sparkling water?

Independent task

Graph labelled "Mixture" with x-axis "Litres (L)" from 0 to 100 and y-axis "Kilograms (kg)" from 0 to 100.

Use the previous two graphs to help with this section.

Ten litres of sparkling water are mixed with one litre of fruit juice.

9. What is the mass of the mixture?

10. What is the density of the mixture?

11. More of the mixture is made in the same ratio, draw a graph to show the mass and volume of the mixture.

Explore

How many different sentences can you write to compare densities of vegetable oil, water and honey?