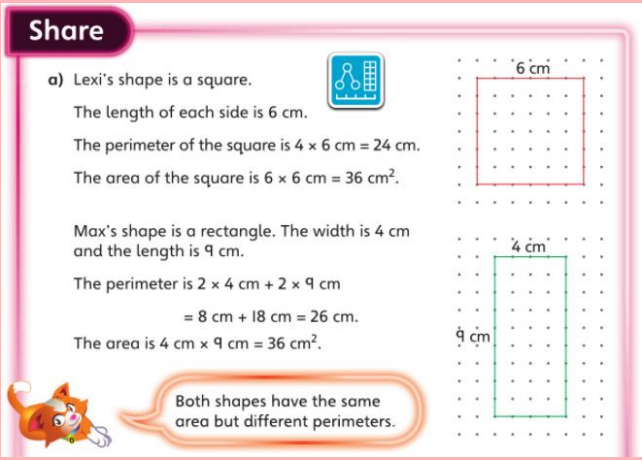
Year 6 Measure Knowledge Organiser

Star Vocabulary

Area	The amount of space taken up by a 2D shape or surface. It is measured in square units.
Perimeter	The distance around the outside of a shape. It is found by measuring the length of all the shape's sides.
Mass	The amount of matter something has. The more matter it has, the heavier it is.
Capacity	The amount of liquid a container can hold.
Length	The measured length of the longest side of an object.

I can convert between mm and cm and m and cm. I also know that we use different units of measure for length, mass and capacity.

I can convert between units of measure when answering problem solving questions. I can also make reasonable estimates about length, weight and capacity.



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a) Lexi's shape is a square.

The length of each side is 6 cm.

The perimeter of the square is 4 × 6 cm = 24 cm.

The area of the square is 6 × 6 cm = 36 cm².

Max's shape is a rectangle. The width is 4 cm and the length is 9 cm.

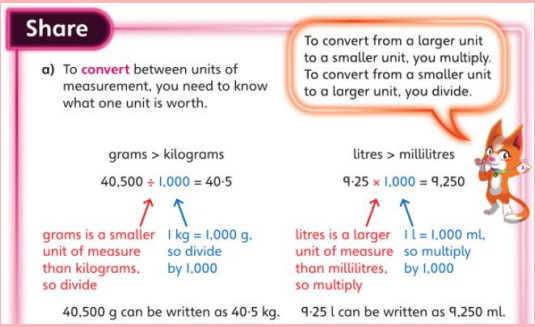
The perimeter is 2 × 4 cm + 2 × 9 cm

= 8 cm + 18 cm = 26 cm.

The area is 4 cm × 9 cm = 36 cm².

It is always important to use the correct unit of measurement. For different situations, some units of measure are more appropriate than others.

Miles	km
5	8
10	16
15	24
20	32
25	40
30	48



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a) To convert between units of measurement, you need to know what one unit is worth.

To convert from a larger unit to a smaller unit, you multiply. To convert from a smaller unit to a larger unit, you divide.

grams > kilograms

40,500 ÷ 1,000 = 40·5

grams is a smaller unit of measure than kilograms, so divide

1 kg = 1,000 g, so divide by 1,000

litres > millilitres

9·25 × 1,000 = 9,250

litres is a larger unit of measure than millilitres, so multiply

1 l = 1,000 ml, so multiply by 1,000

40,500 g can be written as 40·5 kg.

9·25 l can be written as 9,250 ml.

Sentence Stems

It can't be… because…
I noticed that…
It must be … because…
If…then…
This is different because…
This is the same because…
This is true here because…
I already know that… so…

Misconceptions – *make sure that all values are in the same unit before solving problems.*

Factual & Conceptual Fluency progression

- Addition and subtraction within 10.
- Addition and subtraction across 10.
- Secure and maintain fluency in addition and subtraction within and across 10, through continued practice.
- Recall the 10 and 5 multiplication tables, and corresponding division facts.
- Recall the 2, 4 and 8 multiplication tables, and corresponding division facts.
- Recall the 3, 6 and 9 multiplication tables, and corresponding division facts.
- Recall the 7-multiplication table, and corresponding division facts.
- Recall the 11 and 12 multiplication tables, and corresponding division facts.
- Secure and maintain fluency in all multiplication tables, and corresponding division facts, through continued practice.