Maths - Year 4
Calculating 6: Developing fluency with dividing facts to 12 x 12

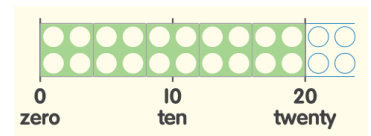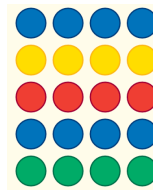### Key Vocabulary

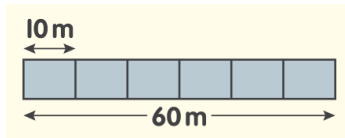|	
Grouping	Occurs in dividing when we know an amount and want to find out how many times a different amount will go into it, e.g. 2 goes into 10 five times.
Halving	Dividing into two equal parts.
Dimensions	The measurements of a shape or object e.g. length, height, width, depth.
Area	An amount of surface.
Scale up/ scale down	Describes the amount by which something is in-creased or reduced to make it larger or smaller in proportion.

Mathematical Skills

- Write dividing sentences using the ÷ symbol.
- Write two dividing sentences for an array.
- Use knowledge of multiplying facts to work out dividing facts.
- Recall dividing facts related to multiplying facts to 12 x 12.
- Explain that we divide to find 'how many...in…', when 'sharing ...into…' and when scaling down, and know that all these cases can be written as dividing sentences.
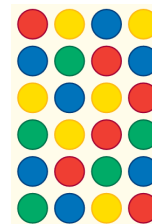
Mathematical Methods

- Exploring a dividing context e.g. 20 ÷ 4 = 5 or 5 x 4 = 20.

- Writing dividing sentences e.g. 60 ÷ 10 =
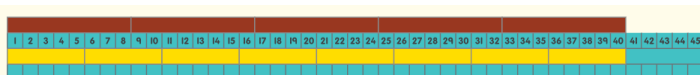
- Finding two dividing facts from an array e.g. 24 ÷ 4 = 6   or   24 ÷ 6 = 4

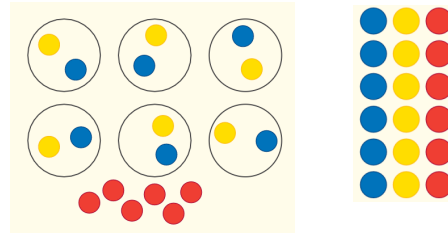- Improving fluency with dividing facts e.g. noticing patterns with multiples of 3 in terms of doubling and halving.

- Using the inverse to derive missing numbers e.g. 40 ÷ ▣ = 8   (8 x 5 = 40)
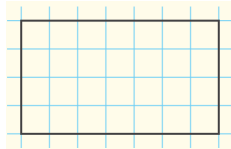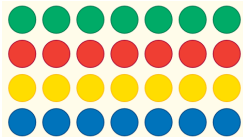
Item	Total in 5 packs
Packs of rubbers	20
Sets of coloured pencils	40
Boxes of pencil sharpeners	45

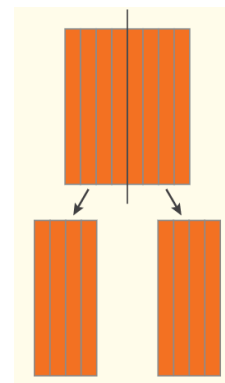- Dividing in a correspondence context e.g. 18 party gifts go into 6 party bags.

- Dividing in the context of working with areas e.g. 4cm x 7cm = 28cm² or 28cm² ÷ 4cm = 7cm.
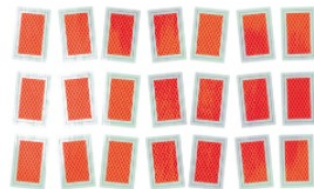
- Dividing in a scaling problem e.g. converting a recipe for 20 down to 10.

Oatcakes
Makes 20

80 g porridge oats
60 ml olive oil
20 g mixed seeds
120 g oatmeal

Can you..?

- There are 21 playing cards which can be used for a game. How many players can join if each player needs: a) 7 cards   b) 3 cards?

- A forest path is being made with pieces of wood that are 4m long. The path is 64m. How many pieces of wood will be needed?

- Work out $21 \div$ ☐ =   7