

## Maths - Year 2

### Calculating 15: Introducing dividing as 'How many...in...?'

#### Key Vocabulary

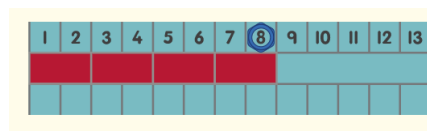
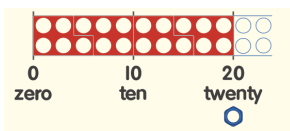
|                    |                                                          |
|--------------------|----------------------------------------------------------|
| Multiplying fact   | A multiplication sentence<br>e.g. $2 \times 3 = 6$ .     |
| Inverse            | The reverse or the opposite.                             |
| Connection         | A link between two or more things.                       |
| Product            | The result of multiplying.                               |
| Dividing...into... | Grouping or sharing a number or amount into equal parts. |
| Groups of          | Groups with an equal amount of parts e.g. 4 groups of 3. |

#### Mathematical Skills

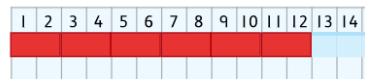
- Explain multiplying as putting lots of equal groups together and dividing as undoing this by breaking the product up into equal-sized groups or parts.
- Use the inverse relationship between multiplying and dividing to help them think about dividing questions.
- Recognise that dividing can be expressed in different words e.g. 'by', 'how many...in?', 'divided into'.
- Use their knowledge of the 2s, 3s, 5s and 10s sequences to model their working on number lines.
- Read and write dividing sentences to express their solutions.

#### Mathematical Methods

- Exploring 'how many...in...?' with sequences of 5s, 2s, 3s and 10s.



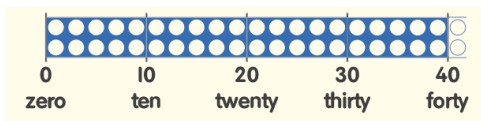
- Introducing the dividing symbol e.g. how many groups of two are in twelve?



$$12 \div 2 = 6.$$

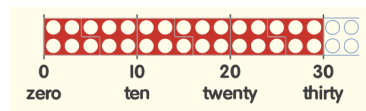
$$\begin{array}{r} 6 \\ 2 \overline{)12} \end{array}$$

- Using the inverse relationship between multiplying and dividing with the 10s sequence e.g. A moon buggy has 10 wheels. If there are 40 wheels, how many moon buggies are there?



$$4 \times 10 = 40, '40 \div 10 = 4' \text{ and } \begin{array}{r} 4 \\ 10 \overline{)40} \end{array}.$$

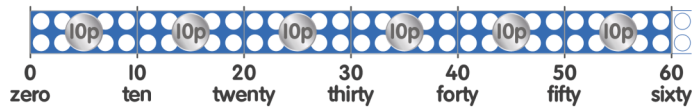
- Using the inverse relationship between multiplying and dividing with the 5s sequence e.g.  $6 \times 5 = 30$ ,  $30 \div 5 = 6$ .



- Using inverse to solve empty box multiplying number sentences.

$$\boxed{\phantom{00}} \times 10 = 30$$

- Working with 10p coins, finding 'how many tens in...?' E.g. how many 10p coins would we need to buy a toy costing 60p?



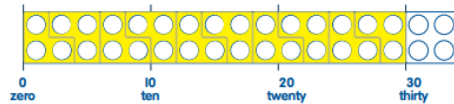
- Working with 5p coins, finding 'how many fives in ...?' E.g. A toy costs 25p. How many 5p coins will be need to buy it?



## Can you..?

- How many groups of 5 are there in 45? Can you use numbers rods to show me?  
Can you write the number sentence?

- Can you write a dividing number sentence for this model? Can you also write a multiplying sentence?



- Can you write some dividing and multiplying number sentences using only the numbers on the cards?

6

10

60