## Maths - Year 4

Pattern and Algebra 4: Exploring 'equals' in balancing number sentences

| Key Vocabulary |  |
| :--- | :--- |
| Multiple | The product of two whole numbers <br> larger than one, e.g. 15 is a multiple of <br> 3 and of 5, $5 \times 3=15$. |
| Common mul- <br> tiples | A number that is a multiple of two or <br> more other numbers, e.g. 24 is a com- <br> mon multiple of 2,3 and 6. |
| Factor | A number that divides into another <br> number exactly, e.g. 4 is a factor of 8. |
| Factor pair | Two numbers that multiply together to <br> make another number, e.g. 2 and 3 are <br> a factor pair of $6,2 \times 3=6$. |

## Mathematical Skills

- Recognise that some multiples occur in more than one sequence.
- Explain that they have used connections between multiplying and dividing to predict how many multiples are in a sequence in the range 1-100.
- Work systematically to compare sequences of multiples and find the lowest common multiple.
- Explain that the factors of a number are the numbers that can be divided into it without leaving a remainder.
- Find factors using inverse multiplying and dividing facts.
- Use multiplying number trios to find factors and factor pairs.


## Mathematical Methods

Finding multiples to 100.
Multiples of 4


- Exploring common multiples e.g. of 2, 4 and 5.

- Finding the lowest common multiple e.g. multiples of 4 and 5.

- Making lists of multiples to solve problems.
- Exploring multiples and factors.
$2 \times 6=12$ and $6 \times 2=12$


| $\mathbf{x}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :---: | :---: | :---: | :---: |
| $\mathbf{6}$ | 12 | 18 | 24 |
| $\mathbf{7}$ | 14 | 21 | 28 |
| $\mathbf{8}$ | 16 | 24 | 32 |

- Exploring factors with apparatus e.g. 24.



## Can you..?

- Work out the first three common multiples of 2,4 and 5.
- Karmal jogs every 5 days and Janet jogs every 3 days. They both start jogging on a Sunday. On which day of the week will they both jog on the same day again?

Find 3 factor pairs for 20.

