# Maths - Year 4

## Pattern and Algebra 1: Exploring sequences and number patterns

### Key Vocabulary

| | |
|---|---|
| Multiple | The product of two whole numbers larger than one, e.g. 15 is a multiple of 3 and of 5, 5 x 3 = 15 |
| Term | One of the numbers in sequence. |
| Ordinal numbers | First, second, third etc. |
| Sequence | An ordered list of numbers, shapes or objects, e.g. 20, 25, 30... |
| Increasing | Getting larger in number or size. |
| decreasing | Getting smaller in number of size. |
| Constant difference | The difference between intervals in a sequence of numbers. |

### Mathematical Skills

- Recognise sequences of multiples.
- Predict which terms are missing in sequences of multiples.
- Explain connections between patterns in the sequences of multiples of 10 and 1.
- Recognise and describe sequences built with number rods.
- Find differences between terms in increasing and decreasing sequences built with number rods.
- Describe a sequence of increasing measurements on a scale and explain the constant difference as an amount.
- Use the idea of constant different to find missing numbers in sequences, including on measuring scales.

### Mathematical Methods

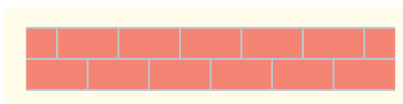- Making sequences of multiples with number rods and Numicon shapes.
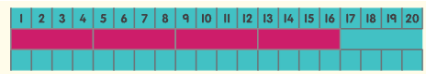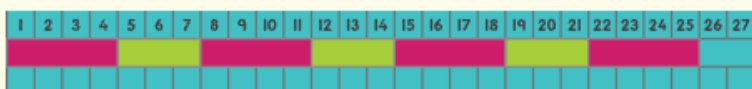


- Exploring patterns in sequences of multiples.
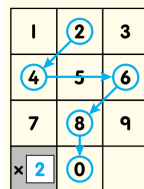


- Comparing sequences of multiples and looking for patterns.
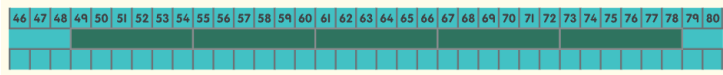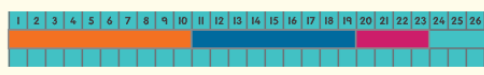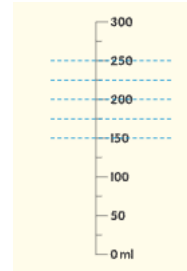


- Making sequences using multiples of 10.



- Exploring other sequences with number rods.

- Using number rods to find missing information in sequences with constant differences.



- Sequences in measuring problems e.g. reading measuring scales.



## Can you..?

- Find the missing 1st, 3rd, 5th, 6th and 8th terms in this sequence.

■, 24, ■, 40, ■, ■, 64, ■

- Continue the sequence 3, 8, 11, 16, ___, ___, ___, ___

- Tanya's hamster eats 14g of food each day.  Tanya has one full 100g bag of food on Sunday. What day of the week will the food run out?