

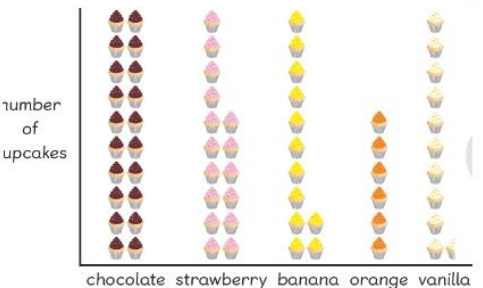
Key Vocabulary
Line graph
Bar graph
Picture graph
Axis
Horizontal
Vertical
Interpret
Denominator
Numerator
Mixed numbers
Simplify
Improper
Equivalent
Convert
Duration
Time
Digital/analogue

## Knowledge Organiser for Year 4 Maths- Graphs, Fractions and Time

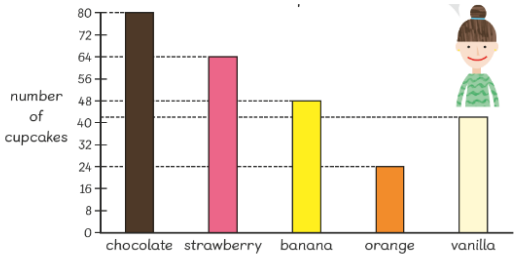
### GRAPHS

- Drawing and reading picture graphs and bar graphs.
- Reading and interpreting different types of graphs.
- **Bar graphs, picture graphs** and **line graphs** are different. All the graphs have an x and y axis. The x axis goes across and the y axis goes up. Below is a picture graph and a bar graph.

Number of Cupcakes Sold



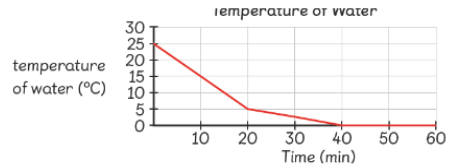
Flavor	Number of Cupcakes
chocolate	10
strawberry	8
banana	6
orange	4
vanilla	2



Flavor	Number of Cupcakes
chocolate	80
strawberry	64
banana	48
orange	24
vanilla	40

### GRAPHS

Below is a line graph. Line graphs show changes over a period of time.



Time (min)	Temperature (°C)
0	25
10	20
20	10
30	5
40	2
50	1
60	1

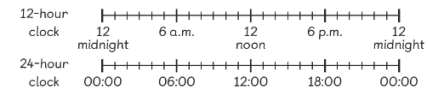
### FRACTIONS

- Counting in hundredths and write mixed numbers. **Mixed numbers** are combinations of whole numbers and fractions such as  $1\frac{3}{8}$ .
- Finding equivalent fractions. **Equivalent fractions** are fractions where both the **numerator** and **denominator** can be multiplied or divided by the same number.
- Simplifying improper fractions. **Improper fractions** are where the numerator is greater than the denominator.

### TIME

- Telling time on a 24 hour clock.

There are 24 hours in a day.



- Converting different units of time. There are:
  - 60 seconds in one minute.
  - 60 minutes in one hour.
  - 24 hours in one day.
  - 365 days in one year (366 in a leap year).
- Using a number line to help work out durations of time. **Duration** means the length of time that something takes from start to finish. 'h' stands for hour.

