

## Maths - Year 4

### Numbers and the Number System 4: Introducing negative number

#### Key Vocabulary

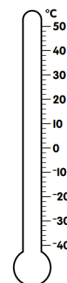
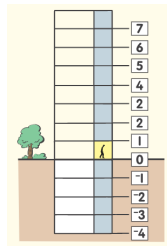
Negative numbers	Negative numbers show amounts below zero, e.g. -3.
Positive numbers	Positive numbers show amounts above zero.
Horizontal	A straight line parallel to the horizon.
vertical	A straight line at right angles to the horizon.
Increasing	Getting larger in number or size.
Decreasing	Getting smaller in number or size.
Magnitude	Refers to the size of something.
Degrees Celsius (°C)	Measurement used to describe temperature.

#### Mathematical Skills

- Explain that the larger the negative number, the further it is from 0.
- Read negative number notation on a vertical scale e.g. on a thermometer using degrees Celsius (°C)
- Explain that the magnitude of negative numbers increases as temperature falls.
- Spot the symmetry in numbers increasing and decreasing either side of 0 on the number line.
- Compare and order negative numbers.
- Relate the negative and positive numbers on the number line to the passage of years BCE and CE.
- Explain that both direction and distance (or size) are involved when making forward and backward movements on the number line.

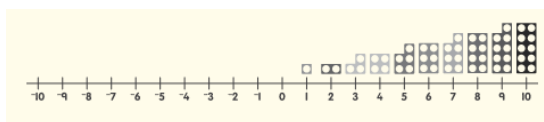
#### Mathematical Methods

- Understanding negative numbers.



- Negative numbers in the context of temperature.

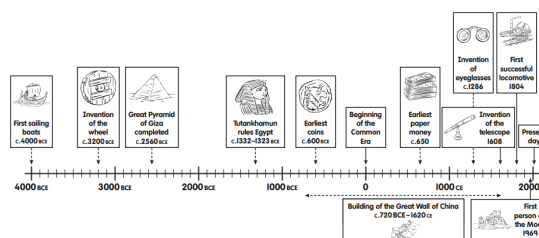
- Negative number lines.



- Warmer and colder.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
South Pole (°C)	-28	-41	-54	-57	-57	-58	-60	-60	-59	-51	-38	-28
London (°C)	3	4	7	9	12	15	17	16	14	11	8	5

- Negative numbers and timelines.



## Can you..?

- Count backwards in ones from 7 to -20?
- Work out the three coldest months in the South Pole.

Average temperatures in a year												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
South Pole (°C)	-28	-41	-54	-57	-57	-58	-60	-60	-59	-51	-38	-28
Cape Town, South Africa (°C)	22	23	21	18	16	13	13	13	14	16	18	20

- Complete the number line

