Negative Numbers

We think of numbers being on a number line:

0 1 2 3 4 5 6 7 8 9 10 → ∞
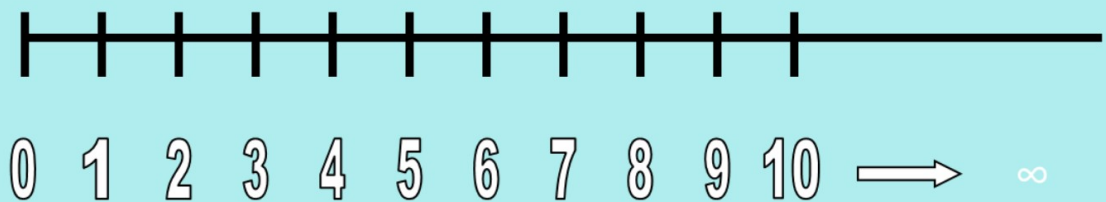
These numbers are all positive numbers,
although we don't actually put the + sign
in front of each number

The number line can also continue on past 0:

-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
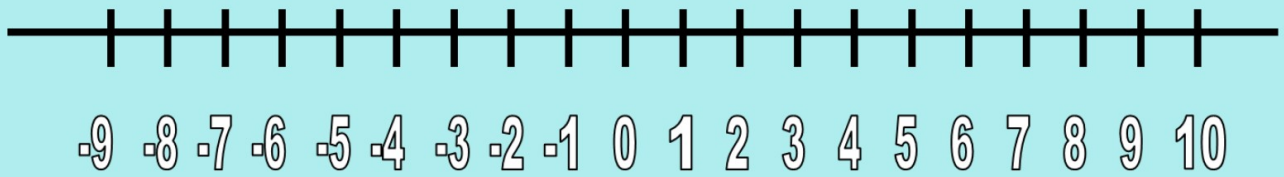
These new numbers are negative numbers.

But why do we have negative numbers?

As the temperature goes below freezing we use negative numbers.

6
5
4
3
2
1
0
- 1
- 2
- 3
- 4
- 5
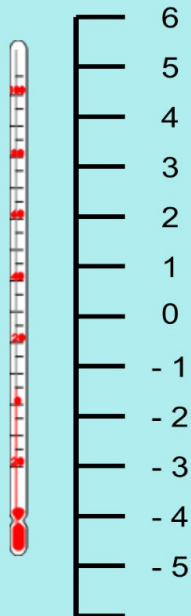
Did you know...
We call -3 negative 3.

or 'minus 3'

Can you identify the missing numbers on the scale?

6	60	30	48	
5	50	25	40	60
4		20	32	48
	30	15		36
2	20		16	24
1	10	5	8	12
0	0	0	0	0
- 1	- 10	- 5	- 8	
- 2	- 20	- 10	- 16	- 24
- 3	- 30	- 15	- 24	- 36
	- 40		- 32	- 48
- 5	- 50	- 25		- 60
- 6		- 30	- 48	- 72
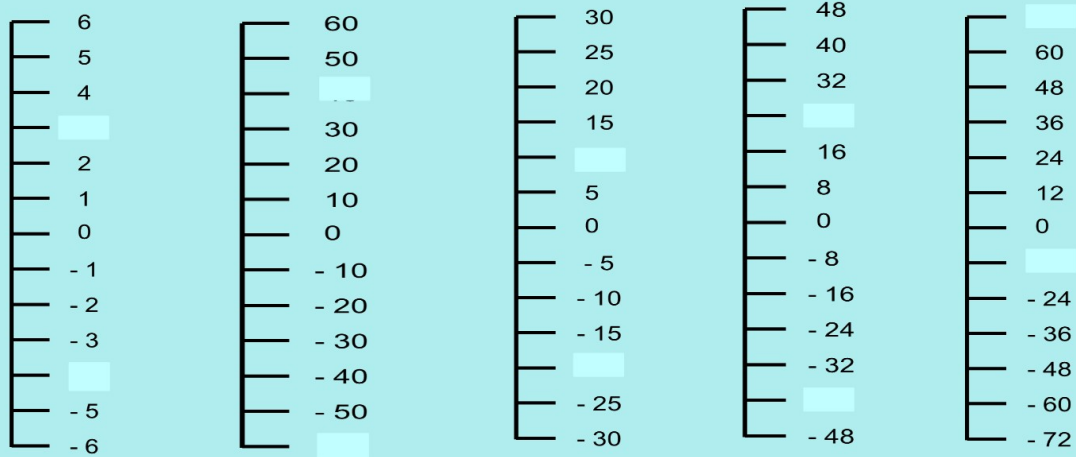
I can order and compare numbers including negative numbers.
I can count forwards and backwards through zero to include negative numbers.

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
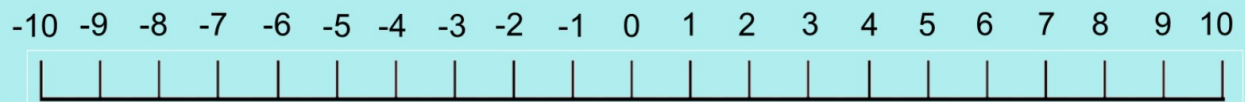
Using the scale above can you...

I can count forwards.

Count forwards 3 from 2
Count forwards 6 from -4
Count forwards 3 from -5
Count forwards 7 from -2

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10

Using the scale above can you...

I can count backwards.

Count backwards 2 from 5
Count backwards 4 from 1
Count backwards 3 from -5
Count backwards 10 from 6

When I wake up in the morning the temperature outside is is 5˚c.
At lunchtime the temperature is 10˚c.

By how much has the temperature risen?

In the summer the temperature is 20˚c.
In the winter the temperature is 5˚c.

What is the difference in the temperature between summer and winter?

Jane sets out for a walk at 8am. When she starts the temperature is -8˚c. By 11:30am the temperature has risen by 6˚c.

What is the temperature now?

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10
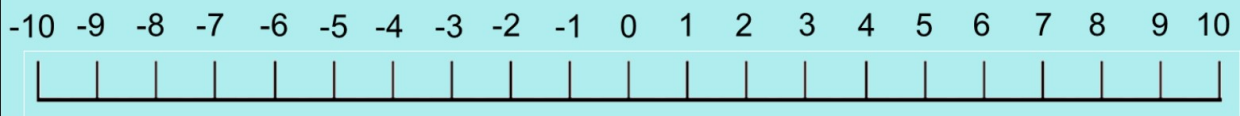
By the time she gets back home, the temperature has dropped by 4˚c.

What is the temperature when sghe gets home?

-10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10

Now have a go at either

Silver: Temperature word problems

Gold: Mixed negative number word problems

<u>**Wednesday 13th January**</u>
<u>**TBAT read Roman Numerals**</u>

Roman Numerals

Roman numerals have survived for thousands of years and are still used today.

Roman numerals can be found on clocks, watches, sun dials, film dates, book chapters and numbering, as bullet points and as the titles of Kings, Queens or Popes.
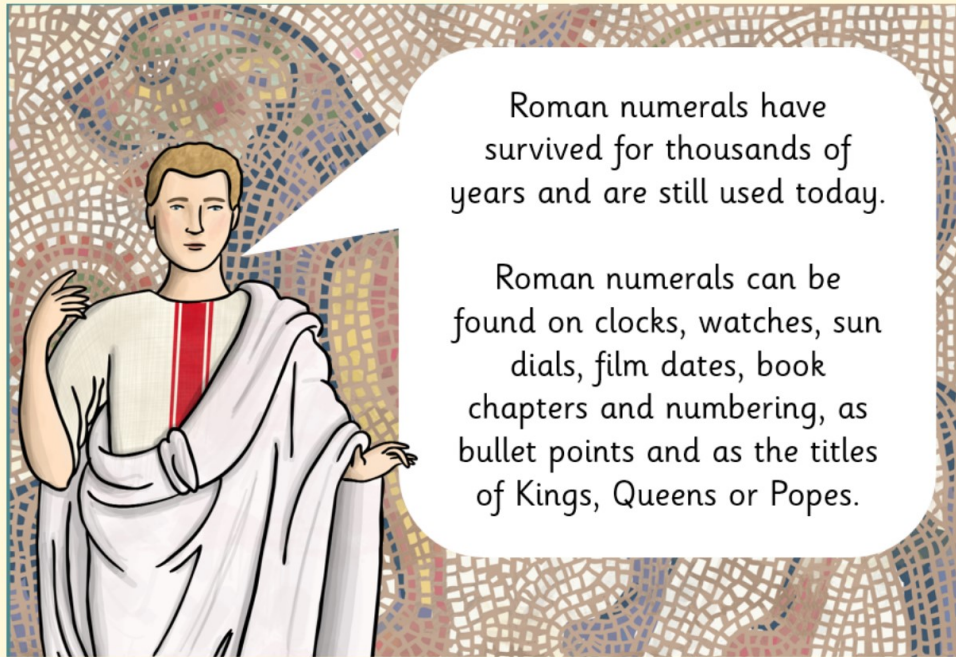
Roman Numerals use 7 different letters to indicate numbers. Os (zeros) are not used. Bigger numbers are made by combining the letters in different ways.

The letters used are:

I	1
V	5
X	10
L	50
C	100
D	500
M	1000

If the larger number symbol is followed by a smaller number symbol you must add the two together. You also add if the two symbols are the same.

Number List	
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

For example:

XI = 10 + 1 = 11

VIII = 5 + 3 = 8

XIX = 10 + 9 = 19

If a smaller number symbol is followed by a larger number symbol you must subtract the small number from the large one.

Number List	
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

For example:

9 = 10 − 1 = **IX**

40 = 50 − 10 = **XL**

Your Challenge Today!

Bronze: Write the Roman Numerals from 1 - 20

Silver: Write the Roman Numerals from 1 - 50

Gold: Write the Roman Numerals from 1 - 100!

Number List	
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

If the larger number symbol is followed by a smaller number symbol you must add the two together. You also add if the two symbols are the same.

If a smaller number symbol is followed by a larger number symbol you must subtract the small number from the large one.

Thursday 14th January

TBAT read, write, order and compare Roman Numerals

Roman Numeral 100 square!

I	II	III	IV	V	VI	VII	VIII	IX	X
XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX
XXI	XXII	XXIII	XXIV	XXV	XXVI	XXVII	XXVIII	XXIX	XXX
XXXI	XXXII	XXXIII	XXXIV	XXXV	XXXVI	XXXVII	XXXVIII	XXXIX	XL
XLI	XLII	XLIII	XLIV	XLV	XLVI	XLVII	XLVIII	XLIX	L
LI	LII	LIII	LIV	LV	LVI	LVII	LVIII	LIX	LX
LXI	LXII	LXIII	LXIV	LXV	LXVI	LXVII	LXVIII	LXIX	LXX
LXXI	LXXII	LXXIII	LXXIV	LXXV	LXXVI	LXXVII	LXXVIII	LXXIX	LXXX
LXXXI	LXXXII	LXXXIII	LXXXIV	LXXXV	LXXXVI	LXXXVII	LXXXVIII	LXXXIX	XC
XCI	XCII	XCIII	XCIV	XCV	XCVI	XCVII	XCVIII	XCIX	C

What numbers are these?

XCVI =

LI =

XXVIII =

Thursday 14th January

TBAT read, write, order and compare Roman Numerals

Number List	
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

What numbers are these?

CL =

MMXXI =

CMXCIX =

Number List	
I	1
V	5
X	10
L	50
C	100
D	500
M	1000

Can we order these numbers?

LXXI   XXI   C   LXVI

Thursday 14th January

TBAT read, write, order and compare Roman Numerals

Task:

There are two tasks to have a go at, both with a mixture of questions.

Choose questions from either sheet that you feel most comfortable with.

Number List	
I	1
V	5
X	10
L	50
C	100
D	500
M	1000