A Read and Write Numbers Less Than 0

What You Will Learn:
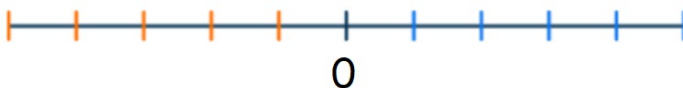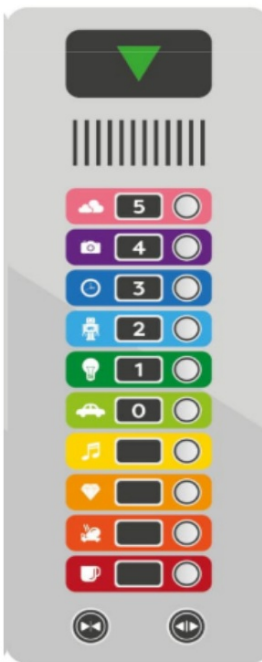- Read and write numbers that are less than 0.

Look Back

Caz and Izzy are in the lift of a building.
They go down 3 floors.

a If they entered the lift on the 5th floor, on which floor did they get off? 2nd floor

b If they got off at the ground floor, on which floor did they enter the lift? 3rd floor

Explain how you know to a partner.

0

What are the missing numbers on the lift panel?
–1, –2, – 3 and –4

Make a generalisation. Use your generalisation to describe the numbers.
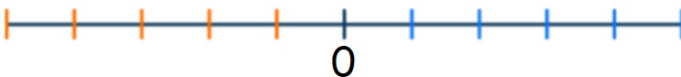*The numbers above 0 are increasing and all the numbers below 0 have negative signs.*
They are getting further from 0.
The number that is below –4 is –5.

Thinking Cap

What are the missing numbers on the lift buttons? What do you notice about the numbers on the lift? Draw a number line to help you.

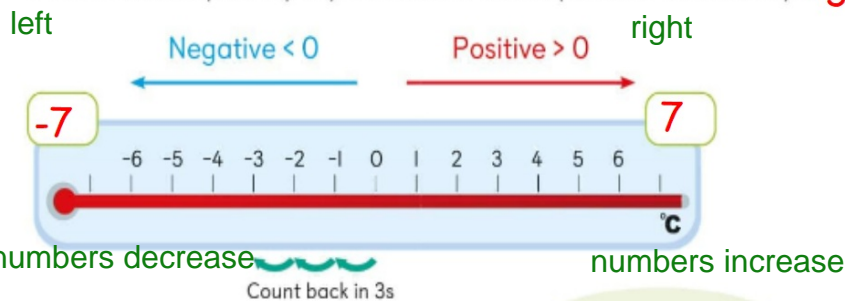What do you notice about the numbers?

For example, the numbers are negative and they are a reflection of positive numbers.

For example, the numbers above zero are increasing and the numbers below zero each have a negative sign. The number after 5 is 6 and the number below -4 is -5.

Let's Learn

Chia lives in Beijing and it is winter now. On Wednesday, the temperature is 0°C. On Thursday, it drops by 3°C. What is the temperature on Thursday? -3 °C

left   right

Negative < 0   Positive > 0

-7   7

-6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6

°C

numbers decrease   numbers increase

Count back in 3s

Wednesday 0°C

count back in 3s

3°C less than 0°C is −3°C.

Chia reads −3 as **negative three**.

The temperature on Thursday is negative 3°C.

What is the same and what is different between positive and negative numbers? Explain to your partner.

What do you notice about the numbers? Explain to a partner using the number line.

The numbers on the left of 0 on the number line are called **negative numbers**.

From 0°C, we make 3 jumps to the left. The temperature on Thursday is −3°C.

Where are 7 and −7 on the number line? Do you think 0 is positive or negative?

Zero is neutral which means that it's neither postive nor negative.

What is the same and what is different between positive and negative numbers?

The numbers have place values on either side of zero but negative numbers are denoted by the negative sign and they become less the further away from zero they are.
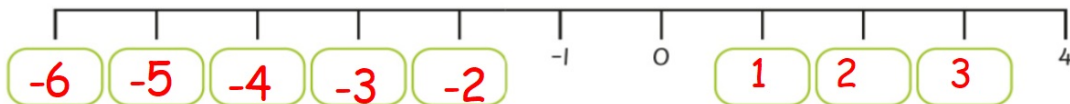
Note: The numbers above zero are positive and always on the right of zero but we do not use the word 'positive'.
However, it is mandatory to use the word negative to say a negative number. Negative numbers are always to the left of zero.

Let's Practise

I   Write the missing numbers on the number line.

| -6 | -5 | -4 | -3 | -2 | -1 | 0 | 1 | 2 | 3 | 4 |

Write a number that comes after the number 4 and a number before the number on the left. __5 , -7__

Compare your answer with a partner. How do you know if you are both correct?

25

Each number on the right of zero increases by 1 more and each number on the left decrease by 1
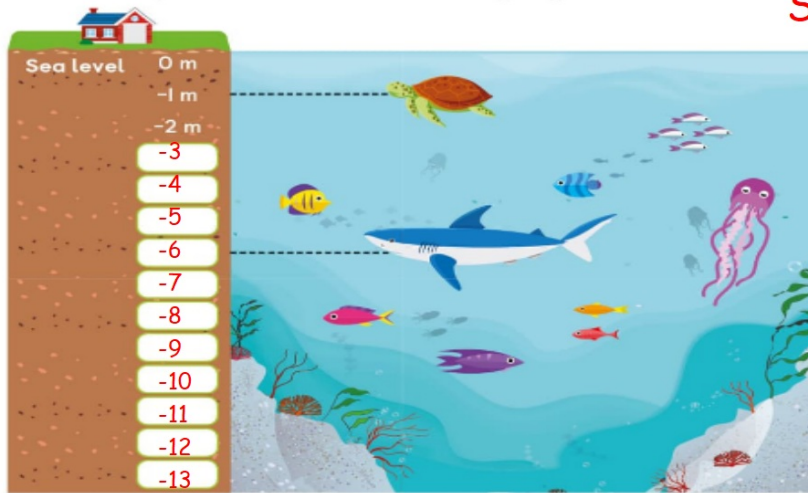
Let's play a game

2 Eren builds a model to represent the land and the sea.

a Mark the depths on the number line using negative numbers.

Student's Book p.26

Sea level   0 m
            –1 m
            –2 m
            -3
            -4
            -5
            -6
            -7
            -8
            -9
            -10
            -11
            -12
            -13

b How far is the bottom of the sea from the sea level in words?

negative thirteen
_____ m

c Where is the shark on the number line? _____-6_____ m

d Where is the turtle on the number line? _____-1_____ m

Explain to your partner how you know.

3 Draw and estimate –20, –12, 8 and 0 on the number line.

Which number did you mark first? Does it help to estimate where 0 goes first? Which number did you do next?

–30   -20   -12   0   8   10

Tick (✓) to show what you can do.

☐ I can read and write numbers that are less than 0.