Number and Place Value Year 6(Negative Numbers) Answers
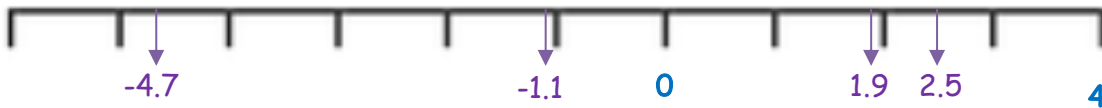
1) Place these amounts on the number line.

2.5	-4.7	1.9	-1.1

For this question you want to ensure that the children understand the position of negative numbers in relation to zero. Children may make errors when placing the decimal amounts in the correct position as they are the reverse to positive amounts.

-4.7   -1.1   0   1.9 2.5   4

2) A dive board off the top of a boat is 5 metres above the sea . James dives in to the sea. He dives 9.5 metres from the top of the board into the sea.

a)How deep in meters did he go? Write your answer using negative numbers.

Observe here if the children can add and subtract amounts crossing zero and with negative numbers. Observe which strategies the children use to help to select activities in Q2.

- 4.5

b)Once he has dived he swims up towards the top of the sea. He swims 1.2 metres and then spots a fish next to him. How far beneath the top of the surface is the fish. Record your answer as a negative number.

Observe here if the children can add and subtract amounts crossing zero and with negative numbers.

- 3.3

3)Here are temperatures of different places in December:

Place	Temperature
Tenerife	17
Serbia	3.4
Canada	-1.5
Australia	22.7
Sweden	-2.4
Finland	-6.8
England	5

a) How much colder is Canada than England?

Ensure the children understand that they need to find the difference by counting on or adding the amounts. Suggested strategies can be found in lesson notes Q3 in the place value section.

6.5 °C

b) How much hotter is Australia than Sweden?

Observe whether the children understand that they have to find the difference for this question. Observe the strategies the children have used to work out the difference here to help you to group the children by their needs for the input sections of Q3 lesson notes.

25.1 °C

c) One Wednesday, Ben records the temperature in his garden in Finland. It has a difference of 1.7 degrees than the average temperature of Finland. Write all possible temperatures in Ben's garden.

Assess whether the children understand that there are 2 possible answers and can explain how they worked these out.

-5.1 °C and -8.5 °C

BRICKWORK
Mathematics