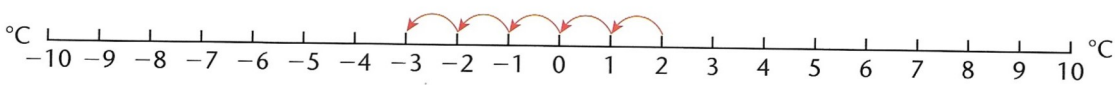
TARGET **To count forwards and backwards through zero and to interpret negative numbers in context.**

Negative numbers
Below zero
Have a minus sign

Positive numbers
Above zero



We often use negative numbers in the context of temperature.

Example The temperature is 2°C. It falls 5°C.
What is the new temperature? Answer −3°C

A

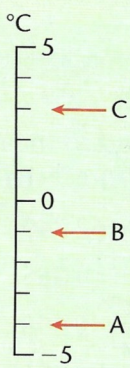
Use the number line above.

1. Count on 3 from −8
2. Count on 6 from −10
3. Count on 4 from −1
4. Count on 6 from −4
5. Count on 4 from −3
6. Count on 3 from −5
7. Count on 7 from −7
8. Count on 8 from −2
9. Count on 5 from −6
10. Count on 10 from −3
11. Count on 6 from −8
12. Count on 9 from −5

Copy and complete by filling in the boxes.

13. −5 −4 ☐ ☐ ☐ ☐ 1 ☐ 3 ☐ 5
14. ☐ ☐ −6 −4 ☐ 0 ☐ ☐ 6 ☐ 10
15. ☐ ☐ 3 2 ☐ ☐ −1 −2 ☐ −4 ☐
16. 10 ☐ ☐ ☐ 2 0 −2 ☐ ☐ ☐ −10

Look at the scale.



17. What temperatures are shown by the letters?
18. Which letter shows the coldest temperature?
19. Give the difference in temperature between:
    - **a)** A and B
    - **b)** B and C
    - **c)** A and C
20. What would the temperature be if it was:
    - **a)** at B and rose 5°
    - **b)** at B and fell 4°
    - **c)** at A and rose 6°
    - **d)** at C and fell 5°.

B

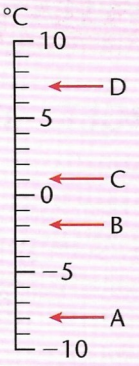
Use the number line on page 8.

1. Count on 7 from −9
2. Count on 6 from −3
3. Count on 10 from −6
4. Count on 8 from −1
5. Count back 5 from 2
6. Count back 12 from 8
7. Count back 7 from 0
8. Count back 6 from 5

Copy and complete the sequences.

9. 4 3 2 1 ☐ ☐ ☐
10. −5 −4 −3 −2 ☐ ☐ ☐
11. ☐ ☐ ☐ −2 −4 −6 −8
12. 6 4 ☐ ☐ ☐ −4 −6
13. −10 −8 ☐ ☐ ☐ 0 2
14. 9 7 5 3 ☐ ☐ ☐

15. What temperatures are shown by the letters?



16. Give the difference in temperature between:
    - **a)** A and C
    - **b)** B and D
    - **c)** B and C
    - **d)** A and D

17. What would the temperature be if it was:
    - **a)** at A and rose 10°
    - **b)** at B and rose 5°
    - **c)** at C and fell 10°?

Put > or < in each box.

18. 0 ☐ −2
19. −5 ☐ 5
20. −4 ☐ 3
21. −1 ☐ −2
22. 0 ☐ 1
23. −2 ☐ −8
24. −1 ☐ 0
25. 7 ☐ −9

C

Find the difference between:

1. −2 and −5
2. −7 and 1
3. 4 and −1
4. −1 and 9
5. −6 and −1
6. 0 and −3
7. 2 and −4
8. −5 and 4.

Put these numbers in order, smallest first.

9. 1 −3 2 0 −5
10. 2 4 −1 −3 1
11. 0 2 −4 −1 3
12. 1 −5 0 −2 5

Copy and complete these tables showing changes in temperature.

13.

Sunday	Change	Monday
−2°C	+4°C	
1°C	−3°C	
0°C	−5°C	
3°C	−4°C	
−5°C	+3°C	
−3°C	+5°C	

14.

Sunday	Change	Monday
3°C		−3°C
−4°C		−1°C
−1°C		5°C
5°C		−7°C
0°C		−4°C
−6°C		3°C