

Negative Numbers and Temperature

Amazing Fact

The warmest temperature ever recorded at the South Pole was a freezing -12.3°C in December 2011, making it one of the coldest places on Earth.

Challenge

Complete the activities using negative numbers in a temperature context.

1. Put these temperatures in order, the coldest first.

a. 2°C , -8°C , -1°C , -6°C , -4°C

b. 6°C , 10°C , -15°C , -11°C , 14°C

c. 16°C , 18°C , -23°C , -25°C , -13°C , 12°C , 20°C

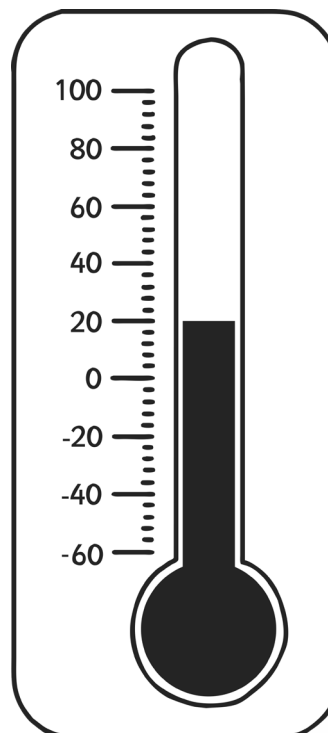
2. Which of these temperatures is lowest?

a. -4°C or -2°C

b. -8°C or 8°C

c. -16°C or -17°C

d. -5°C or -6°C



3. Answer the questions below:

a. The temperature rises by 15 degrees from -4°C . What is the new temperature?

b. The temperature falls from 11°C to -2°C . How many degrees does the temperature fall?

c. The temperature is 6°C . It falls by 8 degrees. What is the temperature now?

d. The temperature is -3°C . How much must it rise to reach 5°C ?

e. What is the difference in temperature between -4°C and 14°C ?

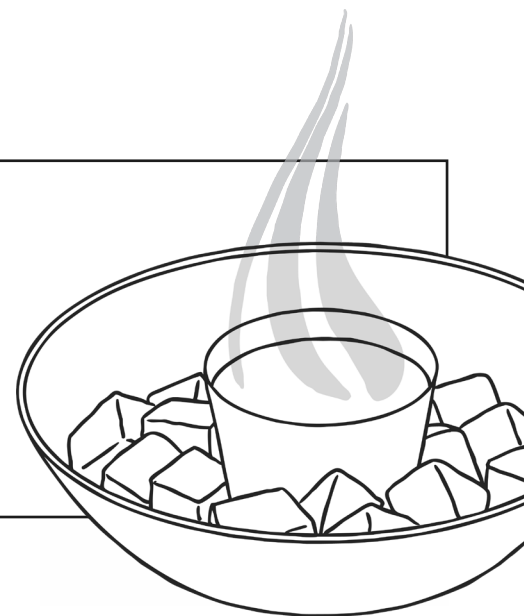
f. The temperature was -5°C . It falls by 6 degrees. What is the temperature now?

g. The temperature is -11°C . It rises by 2 degrees. What is the temperature now?

h. The temperature is -20°C . How much must it rise to reach -5°C ?

You could also try to find out:

- which places, if any, are colder;
- how scientists based at the South Pole survive the cold;
- when, and for how long, the South Pole gets sunshine;
- where the hottest place on Earth is.



Negative Numbers and Temperature **Answers**

1.

a. -8°C , -6°C , -4°C , -1°C , 2°C ,

b. -15°C , -11°C , 6°C , 10°C , 14°C

c. -25°C , -23°C , -13°C , 12°C , 16°C , 18°C , 20°C

2.

a. -4°C

b. -8°C

c. -17°C

d. -6°C

3.

a. 11°C

b. 13°C

c. -2°C

d. 8°C

e. 18°C

f. -11°C

g. -9°C

h. 15°C