



# Using a thermometer to find the difference in temperature

- Find the difference between a positive and a negative number or two negative numbers in context

1 Order these numbers from smallest to largest.

- a 9 -5 3 -4 -1 7 -10 6  
 b 0 -14 -5 8 10 -3 2 -2  
 c -21 -7 15 7 -3 12 -8 1  
 d -4 -8 -2 0 -9 -1 3 5  
 e -15 -31 -28 -6 -22 -11 -29 -25

2 Use the thermometer on the next page to help you work out these questions.

- a The temperature is  $2^{\circ}\text{C}$ . It drops by 3 degrees. What is the temperature now?  
 b The temperature is  $4^{\circ}\text{C}$ . It drops by 7 degrees. What is the temperature now?  
 c The temperature is  $5^{\circ}\text{C}$ . It drops by 9 degrees. What is the temperature now?  
 d The temperature is  $1^{\circ}\text{C}$ . It drops by 10 degrees. What is the temperature now?  
 e The temperature is  $3^{\circ}\text{C}$ . It drops by 6 degrees. What is the temperature now?  
 f The temperature is  $-4^{\circ}\text{C}$ . It drops by 2 degrees. What is the temperature now?  
 g The temperature is  $-7^{\circ}\text{C}$ . It rises by 3 degrees. What is the temperature now?  
 h The temperature is  $-10^{\circ}\text{C}$ . It rises by 6 degrees. What is the temperature now?

## Remember

Remember the numbers below zero are negative numbers.

Use the thermometer to help you work out these questions. Record your answers as calculations.

- a The temperature is  $7^{\circ}\text{C}$ . It drops by 9 degrees. What is the temperature now?  
 b At night the temperature was  $-6^{\circ}\text{C}$ , in the day it was  $1^{\circ}\text{C}$ . What was the difference between the temperatures?  
 c The temperature is  $-11^{\circ}\text{C}$ . It rises by 4 degrees. What is the temperature now?  
 d The temperature is  $-2^{\circ}\text{C}$ . If it gets 5 degrees colder what will the temperature be?  
 e The highest temperature this week was  $3^{\circ}\text{C}$ . The lowest temperature was  $-5^{\circ}\text{C}$ . What was the difference between the highest and lowest temperatures?  
 f The temperature at the North Pole is  $-20^{\circ}\text{C}$ . How much will the temperature need to rise to be  $-5^{\circ}\text{C}$ ?  
 g The temperature now is  $-1^{\circ}\text{C}$ . The weather forecast predicts that later on it will be  $-13^{\circ}\text{C}$ . How much will the temperature drop?  
 h In London the temperature is  $-1^{\circ}\text{C}$  and in Moscow it is  $-9^{\circ}\text{C}$ . How much colder is Moscow than London?  
 i The temperature is  $-6^{\circ}\text{C}$ . It rises by 14 degrees. What is the temperature now?  
 j The temperature now is  $-4^{\circ}\text{C}$ . Tomorrow it will be 8 degrees warmer. What will be the temperature then?

Work out these calculations.

- |            |             |              |
|------------|-------------|--------------|
| a $4 - 9$  | e $1 - 13$  | i $-20 + 7$  |
| b $3 - 15$ | f $-9 + 3$  | j $-18 + 12$ |
| c $0 - 7$  | g $-10 + 9$ | k $-12 + 6$  |
| d $2 - 12$ | h $-14 + 5$ | l $0 - 12$   |

