

Care Practice Book

Temperature – Levels One & Two - ANSWERS

Question 1

a) Do you think it would feel hot outside if the temperature was 45°F?

No. This would be close to the average winter temperature and so it would feel quite cold.

b) Would you put someone in a bath if the temperature of the water was 60°C?

No. This would be too hot as it's above ideal body temperature. Over 44 degrees is considered a health risk for vulnerable people.

c) A person has a temperature of 99 degrees. Do you think the temperature has been measured using the Fahrenheit or Celsius scale?

The Fahrenheit scale. The Celsius scale would mean they were about to boil!

d) A client has checked the temperature in their freezer and found it is minus 8 degrees Celsius. They think their freezer is too cold. Do you agree? Why?

No, the freezer is too warm. Minus 8 is hotter than the ideal temperature of minus 18 degrees.

Question 2

Write a comment under each thermometer about the temperature shown.



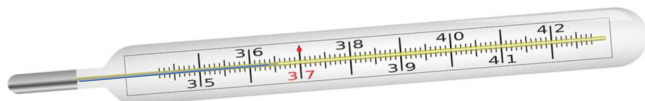
This person's temperature is very high. They could have heatstroke or another medical condition.



This person has a fever.



This person has a normal body temperature

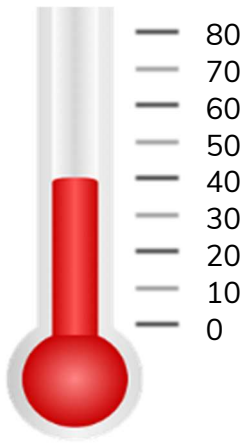


This person's temperature is slightly low. You may need to monitor them.



This person is hypothermic.

Question 3



a) Alina is a carer. She has been given this thermometer to take a client's temperature. Alina does not think this is a very suitable thermometer to use. Explain whether you agree with Alina. Make sure you give your reasons.

Alina is right. The divisions on the temperature scale are not small enough to give an accurate reading. It also does not state if it measures in Celsius or Fahrenheit.

b) Your manager has asked you to keep the room temperature at a maximum of 22°C. The current temperature is 24.7°C. Exactly how much do you need to lower the temperature by to reach the maximum temperature?

$$24.7 - 22 = 2.7 \text{ degrees}$$

c) A bottle of medication states it must be put in cold storage. You find out that this means it should be stored between 2 and 8°C. What is the range of these temperatures?

Range is biggest number minus smallest number.

$$8 - 2 = 6 \text{ degrees}$$

d) You check the temperature of your workplace fridge. It is 4°C. Your colleague reports the temperature has fallen by 5 degrees. What is the new temperature of the fridge? $4 - 5 = -1^\circ\text{C}$

Is the fridge still suitable for cold storage? What would you do next?

No. It is too cold and will freeze the contents. This could damage anything stored in it. You should report the fridge and try to find alternative storage for the contents.

Question 4

a) Convert 93°F to Celsius. Round your answer to 1 decimal place.

$$C = \frac{5}{9}(93 - 32) \rightarrow \frac{5}{9} \times (61) \rightarrow \frac{5 \times 61}{9} \rightarrow = \frac{305}{9} \rightarrow 33.9^\circ\text{C}$$

b) Convert 24°F to Celsius.

$$C = \frac{5}{9}(24 - 32) \rightarrow \frac{5}{9} \times (-8) \rightarrow \frac{5 \times -8}{9} \rightarrow = \frac{-40}{9} \rightarrow -4.44^\circ\text{C}$$

Question 5

Can you complete the conversion of 34°C to Fahrenheit?

$$\frac{9C}{5} + 32 = F$$

$$\frac{9 \times 34}{5} + 32 = F \rightarrow \frac{306}{5} + 32 \rightarrow 61.2 + 32 = \mathbf{93.2^{\circ}F}$$

Question 6

Without looking back at the previous page, can you rearrange the formula and convert 87°C into Fahrenheit? $C = \frac{5}{9}(F - 32) \rightarrow \frac{9C}{5} + 32 = F$

$$\frac{9 \times 87}{5} + 32 = F \rightarrow \frac{783}{5} + 32 \rightarrow 156.6 + 32 = \mathbf{188.6^{\circ}F}$$

Question 6

a) There is high risk if a child aged <3 months has a temperature $\geq 38^{\circ}\text{C}$

Explain what the symbols mean in this statement.

There is high risk if a child under the age of 3 months has a temperature greater than or equal to 38°C

b) What would the missing symbol be here?

You probably have a fever if your temperature is $\geq 37.8^{\circ}\text{C}$