

Temperature

1. What is temperature? Check the correct answer.

- a) Temperature measures the degree of thermal agitation of the particles in a substance. ☐
- b) Temperature measures the amount of heat contained in a substance. ☐
- c) Temperature measures the amount of thermal energy contained in a substance. ☐
- d) Temperature measures the amount of heat released by a substance. ☐

2. What instrument is used to measure temperature?

3. Complete the following sentence.

Temperature is usually measured using the _____ scale, in which _____ marks the temperature at which water freezes and _____ marks the temperature at which water boils.

4. Which temperature(s) below are examples of the characteristic properties of a substance?

- a) Boiling temperature of acetic acid ☐
- b) Melting temperature of lead ☐
- c) Temperature of the water in a lake ☐

5. Temperatures on the planets of the solar system can vary tremendously.

a) Fill in the following table by calculating the temperature variations on each planet listed.

Planet	Minimum temperature (°C)	Maximum temperature (°C)	Temperature variation (°C)
Mercury	-184	427	
Venus	45	500	
Earth	-91	60	
Mars	-140	20	
Neptune	-223	-214	

b) Which of these planets has the largest temperature variation? Explain your answer.

