SASKATCHEWAN PHYSICAL SCIENCE 20 · UNIT A · 25 QUESTIONS

Heat — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A measure of the average kinetic energy of particles is called**

- A temperature
- B thermal energy
- C specific heat capacity
- D conduction

Understand It with Pulse | Flag a mistake

2 **Heat flows naturally from**

- A cold to hot
- B hot to cold
- C low to high pressure
- D dark to light

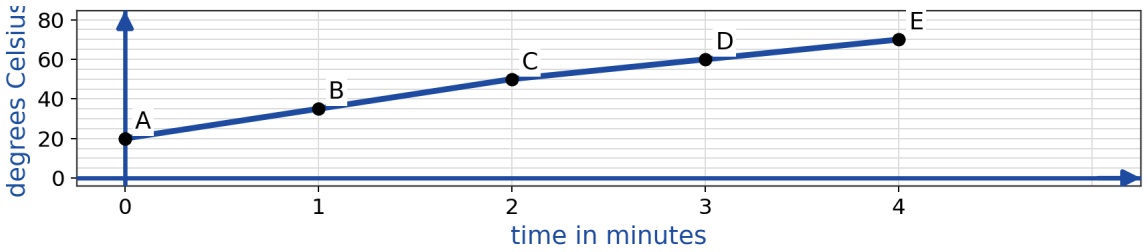
Understand It with Pulse | Flag a mistake

3 **Water of mass 100 g warms by 10 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The graph shows temperature of water being heated over time. The temperature at 3 minutes, in degrees Celsius, is _____**



ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Energy transferred because of a temperature difference is called**

A specific heat capacity

B conduction

C heat

D convection

Understand It with Pulse | Flag a mistake

6 **Water has a high specific heat capacity, so it**

A warms very quickly

B boils at room temperature

C never freezes

D warms and cools slowly

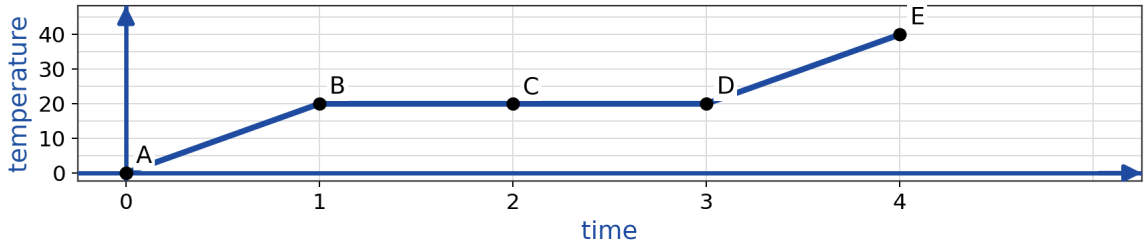
Understand It with Pulse | Flag a mistake

7 **Water of mass 200 g warms by 5 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **The graph shows a heating curve with a flat section. During the flat section, heat is used for**



- **A** a change of state
- **B** raising temperature
- **C** cooling the substance
- **D** reducing mass

Understand It with Pulse | Flag a mistake

9 **The total kinetic energy of particles in a substance is called**

- **A** conduction
- **B** thermal energy
- **C** convection
- **D** radiation

Understand It with Pulse | Flag a mistake

10 **Convection happens in**

A solids only

B a vacuum

C fluids

D insulators only

Understand It with Pulse | Flag a mistake

11 **Water of mass 50 g warms by 20 degrees Celsius . Using c = 4.19 J per gram per degree Celsius , the heat absorbed , in joules , is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **The heat needed to raise one gram of a substance by one degree Celsius is called**

A convection

B radiation

C calorimetry

D specific heat capacity

Understand It with Pulse | Flag a mistake

13 **A metal spoon in hot soup warms mainly by**

A conduction

B radiation

C convection in air

D evaporation

Understand It with Pulse | Flag a mistake

14 **Water of mass 100 grams warms by 10 degrees Celsius using specific heat 4.19 joules per gram per degree Celsius. The heat absorbed, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **Heat transfer by direct contact between particles is called**

A radiation

B conduction

C calorimetry

D kinetic energy

Understand It with Pulse | Flag a mistake

16 **The Sun warms Earth mainly by**

A conduction

B convection

C radiation

D friction

Understand It with Pulse | Flag a mistake

17 **A metal block feels colder than a wooden block at the same temperature because metal**

A conducts heat away from your hand faster

B is colder

C has no heat

D absorbs cold

Understand It with Pulse | Flag a mistake

18 **Heat transfer by movement of a fluid is called**

A calorimetry

B kinetic energy

C insulator

D convection

Understand It with Pulse | Flag a mistake

19 **For calorimetry, the heat absorbed by water is found with**

A Q equals m c delta T

B Q equals m v

C Q equals F d

D Q equals I R

Understand It with Pulse | Flag a mistake

20 **Two samples heated with the same energy: water warms 5 degrees and iron warms 20 degrees. The sample with the larger specific heat is**

A water

B iron

C both the same

D neither

Understand It with Pulse | Flag a mistake

21 **Heat transfer by electromagnetic waves is called**

A kinetic energy

B radiation

C insulator

D temperature

Understand It with Pulse | Flag a mistake

22 **Heat is transferred through a vacuum mainly by**

A conduction

B convection

C radiation

D insulation

Understand It with Pulse | Flag a mistake

23 **Measurement of heat changes in a reaction or process is called**

A insulator

B temperature

C calorimetry

D heat

Understand It with Pulse | Flag a mistake

24 **A student heats 200 grams of water from 20 degrees to 30 degrees. Using 4.19 joules per gram per degree, the heat needed, in joules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **Energy of motion is called**

A temperature

B heat

C thermal energy

D kinetic energy

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. A
2. B
3. 4190
4. 60
5. C
6. D
7. 4190
8. A
9. B
10. C
11. 4190
12. D
13. A
14. 4190
15. B
16. C
17. A
18. D
19. A
20. A
21. B
22. C
23. C
24. 8380
25. D

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