

Specific Heat

Total questions: 21

Worksheet time: 27mins

1. The amount of energy required to raise the temperature 1°C for every kilogram is called ____?

a) Thermal Energy

b) Specific Heat

c) Temperature

d) Kinetic Energy

2. What is the symbol for Thermal Energy?

a) Q

b) t

c) m

d) C

3. What unit do you use to measure Thermal Energy?

a) J/Kg $^{\circ}\text{C}$

b) Kg

c) $^{\circ}\text{C}$

d) J

4. What is the symbol for Specific Heat

a) Q

b) t

c) m

d) C

5. What is the equation to measure change in Thermal Energy?

a) $Q=mc\Delta t$

b) $Q=mc$

c) $Q= \Delta mct$

d) $m=QC$

6. Water has a specific heat of $4184 \text{ J/Kg}^{\circ}\text{C}$. Wood has a specific heat of $1760 \text{ J/Kg}^{\circ}\text{C}$. What material needs more energy to raise the temperature 1°C

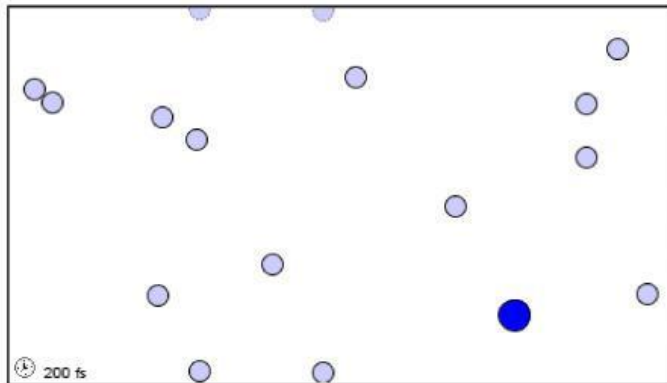
a) Wood

b) Water

c) Both are the same

12. What is Specific Heat?

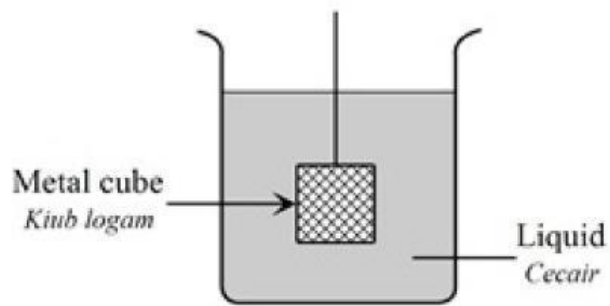
- a) The amount of thermal energy required to increase the temperature of 1kg of a material by 1°C .
- b) The amount of radiant energy required to increase the temperature of 1kg of a material by 1°C
- c) The amount of energy required to increase the temperature of 1kg of a material by 1°C .
- d) The amount of friction required to increase the temperature of 1kg of a material by 1°C .



What would be the effect on the particles if more heat is supplied to the system?

- a) They would slow down
 - b) They would stop moving
 - c) They would speed up
 - d) There would be no effect
14. If two objects have different temperatures when they come in contact, heat will flow from the warmer object to the cooler one UNTIL _____
- a) one reaches a temperature of zero
 - b) they both have an equal temperature
 - c) one runs out of energy
15. The amount of energy required to raise the temperature 1°C for every kilogram is called _____?
- a) Thermal Energy
 - b) Specific Heat
 - c) Temperature
 - d) Kinetic Energy

16. A metal cube at temperature of 70°C is immersed in water at temperature of 20°C . The metal _____ heat while the water _____ heat.
- a) gains, loses b) loses, gains
17. A high specific heat means...
- a) It heats up quickly with energy added b) It requires more energy to change temperature
18. What does temperature measure?
- a) Heat of Molecules b) $^{\circ}\text{C}$
- c) Average Kinetic Energy of Molecules d) Thermal Energy
19. Specific heat is....
- a) The measure of kinetic energy of an objects particles b) A measure of the energy needed to increase the average kinetic energy of the particles
- c) The heating caused by the motion of fluid due to temperature difference d) The transfer of energy by electromagnetic radiation
20. A high specific heat means...
- a) It requires less energy to change temperature b) It requires more energy to change temperature
- c) It heats up very quickly



21.

A metal cube at temperature of 10°C immersed in a liquid at temperature of 70°C .

What is the temperature of the metal cube when thermal equilibrium is achieved between the cube and the liquid?

- a) Between 10°C and 70°C
- b) More than 70°C
- c) Less than 10°C
- d) Same as the room temperature