QUIZIZZ

NAME : _____

CLASS : _____

Specific Heat
11 Questions

DATE : _____

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

   Thermal Energy

   Specific Heat

   Temperature

   Kinetic Energy

2. What is the symbol for Thermal Energy?

   Q

   t

   m

   C

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

   J/Kg °C

   Kg

   °C

   J

4. What is the symbol for Specific Heat

   Q

   t

   m

   C

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

   $Q=mc\Delta t$

   $Q=mc$

   $Q= \Delta mct$

   $m=QC$

6. Water has a specific heat of 4184 J/Kg°C. Wood has a specific heat of 1760 J/Kg°C. What material needs more energy to raise the temperature 1°C

   Wood

   Water

   Both are the same

7.

| Material | Specific heat capacity ($c_m$) (J/kg°C) |
|---|---|
| Aluminum | 900 |
| Copper | 385 |
| Brass | 380 |
| Zinc | 380 |
| Carbon Steel | 490 |
| Chromium Steel | 443 |
| Stainless Steel (AISI 304) | 477 |
| Stainless Steel (AISI 316) | 468 |

Copper, Stainless Steel, Carbon Steel, and Zinc were all heated using the same thermal energy. What material would be the coolest after being heated?

Copper

Carbon Steel

Zinc

Stainless Steel

8. What does temperature measure?

Heat

°C

Kinetic Energy

Thermal Energy

9. How does heat flow?

Always from cold to warm

Always from warm to cold

Both warm to cold & cold to warm

It depends on the temperature

10. A high specific heat means...

It requires less energy to change temperature

It requires more energy to change temperature

It heats up very quickly

11. When a piece of aluminum foil is taken out of the oven and cools from 100° C to 50°C, What is the change in temperature?

50°

0°

100°

150°