Specific Heat- Enriched notes

Def : _____

_____

Specific heat is a characteristic property. The higher SH a substance has, the longer it takes to get hot, but the more heat it absorbed so it will take longer to lose the heat.

Formula:

Variables	Stands for	Unit
Q		
m		
c		
T		
ΔT		

Temperature formulas:
- To get ΔT:
- To get initial temperature:
- To get final temperature:

- Conversion kg-g x 1 000
- Specific heat of water 4.19 J/g$°C$

    Using triangle to isolate:

Specific Heat Practice questions Class

1. The mass of water is 210 g, its initial temperature was 15°C. After heating it for 22 minutes, the water's temperature was 65°C. Calculate the heat energy absorbed.

2. There was 200 g of water with an initial temperature of 15°C. The water had absorbed 24 000 J of energy. What was the water's final temperature?

3. Oil absorbed 55 000 J of heat and has a specific heat of 2.0 g/J°C. What was oil's temperature if 2.2 kg had a final temperature of 70.0°C?

4. What was the mass of water if it absorbed 31 000 J of heat and had a temperature change of 54°C?

5. What is vinegar's specific heat if 30.0 g is heated for 18 minutes and has a temperature change of 26°C to produce 50 500 J of heat?