Worksheet: Thermal Properties of Matter

Madhya Pradesh State Board · Class 11 · Physics · 5 questions · 14 marks

Name: _____	Date: _____	Score: _____ / 14

Q1. A 20 m steel rail at 20 C is heated to 45 C (alpha = 1.2e-5 /C). Find the expansion. *[2 marks]*

Q2. At what temperature is the Celsius reading equal to the Fahrenheit reading? *[2 marks]*

Q3. A 100 g copper block (c = 390 J/kg K) at 200 C is placed in 200 g water at 20 C. Find the final temperature. *[3 marks]*

Q4. Why is the bottom of a lake warmer than the top in winter? *[2 marks]*

Q5. Find the heat to convert 100 g ice at -10 C to steam at 100 C (c_ice = 2100, L_f = 3.36e5, c_water = 4200, L_v = 22.6e5 J/kg). *[5 marks]*