NAME: **HONORS CHEMISTRY**

SECTION: Heat and Phase changes

Write the relevant formula(s) here:

Water

Hfus = 6.00 kJ/mol = 333 J/g

Hvap = 40.6 kJ/mol = 2254 J/g

1. How many joules are required to melt 45.2 g of ice at 0oC?
2. How many joules are released when 245 g of steam condense at 100oC?
3. When 95 grams of an unknown sample are melted, 873 joules are required. Calculate the heat of fusion of the unknown sample.
4. The heat of fusion of copper is 13.1 kJ/mol. How many joules are required to melt 177g of copper at its melting point?
5. What mass of snow can be melted if 963 J are added to snow at its melting point?