# Chapter 10: The Heat is ON

PRINT Name _____ Period _____

**ALWAYS SHOW THE METHOD-- Hup, Two, Three, Four.**

1. Define **Heat Energy** and **Temperature**.
2. Describe **Six** methods of measuring temperature.
3. How does a **Thermostat** operate to maintain constant temperature.
4. List **Eight** important temperatures in Celsius (Centigrade) degrees.
5. Tell how **Conduction**, **Convection**, and **Radiation** transfer heat.
6. Tell why stars "**twinkle**".
7. Describe how the **Crookes Radiometer** detects heat radiation.
8. Explain **Three** methods used by the ***Thermos Bottle*** to reduce heat transfer.
9. Calculate how many **calories** are needed when the temp of 100.0g of Iron are needed to raise the temp. of 800.0g of water from 18C to 100.0C. $c_{Fe}$ = 0.107cal/g•C°. Ans: 877calories.
10. Draw the **Warming Curve** for Water starting at -30C, ending with +140C. Label the parts and tell what's happening in each of the 5 steps.
11. Find the **heat** needed to change 20.0g of ice at -10.0C to steam 130.0C. Ans: 14760calories.
12. Define **Vapor Pressure** and **Boiling Point**. Explain **TWO** ways to boil a liquid.
13. Describe **TEN Shocks** of Vapor Pressure and Boiling Point.
14. Define **Adiabatic** Temperature Changes. State is **Charles' Law**.
15. Define **Capacity** of Air, **Absolute Humidity**, **Relative Humidity**, and **Dew Point**.
16. Tell how to make **Fog** in a Four Liter Jug.
17. Using an equation Explain **Regelation** of **Water**.
18. What is **Sublimation** and give **Three** examples.