Today:
hw check
two videos, take notes 5 min. each
demonstration: how to build a thermometer
Lorax homework: solve pages 1 & 2 together
Tips on how to study for tomorrow's quiz

Purpose:

How do we make invisible heat visible?

WARMUP :

50 Mm = _____ mm

#1 Video Notes: Expansion and Contraction

#2 Video Notes: How to measure temperature

#3

A thermometer works because invisible vibrating matter transfers *KINETIC ENERGY* to the glass and then to the liquid, causing the liquid to expand.

Celsius and Kelvins

East.H.S. ©λ€M|s+ry

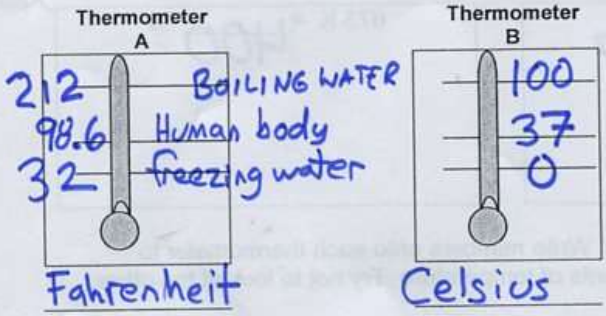
visit http://geneet.weebly.com

Name _____

Date _____

Come for assistance and cheerful encouragement after school Tues, Thurs, every day at lunch

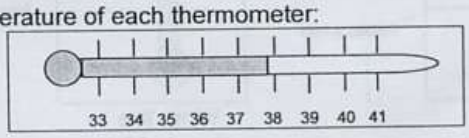
1. **We should MEMORIZE three common temperature scales:** Sketch a third thermometer in the space to the right. Label it "Thermometer C": It should look the same as the other two thermometers (draw the box, the lines, etc.).



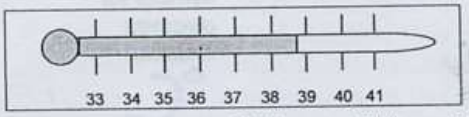
2. **How to read thermometers:**
   i. Read to the nearest line.
   ii. Write that number down.
   iii. Estimate how far you are between the lines.
   iv. Write that after the decimal point.

For example, write the temperature of each thermometer:

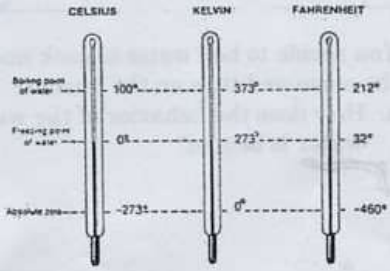
37.7 degrees celsius



38.8 degrees celsius



3. **Converting.**
   a. Based on the picture at right, what number do you want to add to degrees Celsius to turn them into Kelvins?
   You should add 273
   b. Based on the picture at right, what number do you want to subtract from Kelvins to turn them into degrees Celsius?
   You should subtract 273



We will never convert between Fahrenheit and other temperatures in this class. You should know the numbers you wrote for question #1 though.

For example:

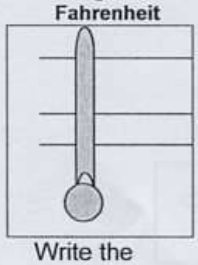
100 °C = 373 K

573 K = 300 °C

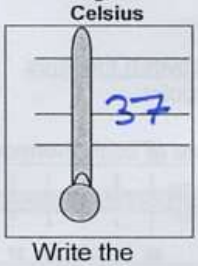
4 °C = ~~3~~277 K

673 K = 400 °C

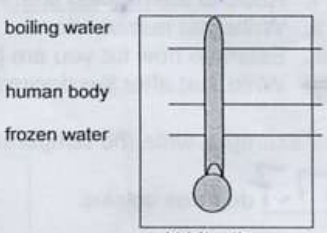
4. **How well can you memorize?** Write numbers onto each thermometer to match the three indicated amounts of temperature Try not to look at the other side of your class notes. . .



Write the symbol for *degrees Fahrenheit:* °F



Write the symbol for *degrees Celsius* °C



Write the symbol for *Kelvins* K

5. You decide to boil water to cook noodles. You place the pan of water on the stove and turn on the burner.
   a. How does the behavior of the water molecules change as the pan of water is heated?

   b. What about your answer to (a) would change if there were more water in the pan?

Homework: Finish the Lorax Sheet. Do a good job – your group will present one of the homework problems tomorrow.