

ALL OTHER PERIODS:

Due by THURSDAY MORNING BEFORE TAKS!!!!

SINCE SCIENCE TAKS is Thursday, those of you with class Thursday and Friday must show me your homework by WEDNESDAY—BEFORE TAKS!!!!

- ConDuction, ConVection, or Radiation? (*We did this in January—read your notes or the book.*)
 - You pick up a hot piece of metal and get burned.
 - You put your hand above a pan of hot water.
 - You feel the heat from a brick wall when you put you hand next to the wall, but not touching it.
 - Why the upstairs of a house is warmer.
 - How the water in the bottom of a pan heats up.

You should be able to do all of this. Show your work or no credit.

- A 5 kg object originally at rest is pushed by a 10 N force for 4 seconds. After the push the object is going 8 m/s. Answer the following.
 - What variable is 6 kg?
 - What variable is 10 N?
 - What variable is 4 sec?
 - What variable is 8 m/s?
 - What kind of energy did it have after it was pushed?
 - What is the weight of the object?
 - Calculate the kinetic energy of the object after it was pushed.
 - Calculate the momentum of the object after it was pushed.
 - Calculate the work done if it was pushed for 5 meters.
 - After it is pushed, how far will it go in 2 seconds?
 - Find the acceleration of the object during the 4 seconds.

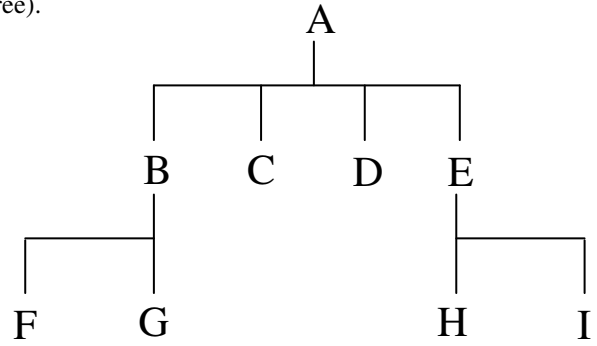
SENIORS CAN STOP

- What is the correct way to heat a test tube over a Bunsen burner?
 - What safety gear should you be wearing (two things)?
- What is the correct way to measure a graduated cylinder?
- What is the **percent** of fat content by mass of a food with a net mass of 29 grams and with 10 grams of fat?
- Given the data in the table at the right, which group measured the speed of the car most consistently?
- Viscosity, buoyancy, or density?
 - ___ Measure of how compact a substance is?
 - ___ A force that keeps an object floating.
 - ___ How slow a substance flows.
 - ___ Syrup has more of this than oil, because syrup pours very slowly.
 - ___ When you are submerged in water, you feel lighter because of this force pushing up on you by the water.
 - ___ Styrofoam floats because this is less than a rock.

	Group A	Group B	Group C	Group D
Trial 1 (in m/s)	3.2	2.9	2.5	3.0
Trial 2 (in m/s)	4.3	3.5	4.2	3.8
Trial 3 (in m/s)	2.8	3.2	2.8	3.3
Trial 4 (in m/s)	3.9	3.4	3.5	3.5

22. The diagram at the right shows represents a phylogenetic tree (a family tree).
Each letter shows a different organism.

- A) Which is most related to G?
- B) Which letter represents the organism that becomes all of the others?



Solubility graphs

23. Use the solubility graph below to answer the following.

- A) What does the x-axis tell you?
- B) What does the y-axis tell you?
- C) Each x-axis square shows how much temperature change?
- D) Each y-axis square shows how many grams of solute?
- E) Which line undergoes the fastest change?
- F) Which substance is the least affected by temperature change?
- G) How much Potassium Bromide can be dissolved at 25°C.
- H) If each line shows the saturation point of 100g of water at a given temperature, how much Potassium Bromide can be dissolved at 25°C in 200g of water?
- I) If 50 grams of table salt is dissolved in 100g of water at 80°C, is the solution saturated, unsaturated or supersaturated?

