Unit 1 Test

Study Guide for Scientific Method, Lab Safety, Metric Measurement, and Graphing Test

Fill in the missing	g words:						
Scientific Metho	d	organized	proble	m-solving p	rocedure in science.		
Variable – any	factor	that	can	change	in the experiment.		
Hypothesis – an can be tested.	ed	ucated	guess	for a so	cientific problem that		
Control – the <u>standard</u> used to compare with the outcome of a test.							
Write the steps of the scientific method in order:							
1. State the	State the Question/Problem		5	Analyz	e Data		
2. Collect Info	Collect Information (research)		6	Drawa	Conclusion		
3 Form	Form a hypothesis						
4 Perfo	rm Exper	iment					

Read the problem and identify the parts of the experiment:

Gloria wanted to see if different chemicals would affect the color of cabbage juice. She put the same amount and type of cabbage juice into four test tubes. She added 10 drops of chemical x into test tube 1, 10 drops of chemical y into test tube 2, and 10 drops of chemical z into test tube 3. She did not add anything to test tube 4. She observed each of the test tubes for 20 seconds after she added the chemical and recorded her observations.

*Study your metric notes (Page 9-11 in notebook)					
*Study your safety symbols (Page 69 in textbook)					
Control Test tube with no chemical added (Test tube 4)					
Dependent Variable	The color of the cabbage juice				
Independent Variable	The different chemicals added				
Constants (3) Type of Juice, amount of juice, amount of chemicals, time observed					
Identify –					

Write the abbreviation for each –

millimeter	mm	milliliter	mL		
kilometer	km	centimeter	cm	_	
kilogram	kg	milligram	mg		
How many mm	in a cm ? <u>10</u>	How many cm in a r	n? <u>100</u>		
How many m in	n a km? <u>1000</u>	_ How many mm in a	m? <u>1000</u>		
Measure this lin	ne in cm:	9.9 cm			
Which basic unit would you use to measure the mass or length of:					
Length of a doc	or <u>m</u> thickn	ess of a nickel <u>mm</u>	Mass of a person	kg	
Distance to Lynchburg <u>km</u> Mass of a piece of candy <u>g</u>					
This country de	veloped the met	ric system France			
3 reasons for us	sing the metric sy	/stem:			
1) It is	easy, b	ased on the number	<u>10 (ten)</u> .		

- 2) It is _______- all scientists understand it.
- 3) It is <u>accurate</u>

Label the following graph with (x axis, y axis, Independent, Dependent)



X (Independent)

Number intervals on a graph must be	consistent	and in order.
Identify the term for the following:		
The middle number of a set of data: _	Median	
The average number of a set of data:	Mean	
The most common number in a set of	data: Mode	