

Catalyst Exercise: 9/9/2014

On your Catalyst Exercise Recording Sheet:

- Describe the scientific process.

On the red folder (your lab folder!):

- Write your name on the tab.
- Place the "Lab Equipment Activity" inside when I give it back to you.

Sep 9-8:34 AM

Nature of Science and Measurement
Note Sheet

How did the subject of chemistry begin?

- Chemistry is **the study of matter and its changes**
- The first known chemist was a woman named Tapputi, a perfumer and palace overseer who distilled the essences of flowers and other aromatic materials, filtered them, and repeated several times until she got exactly what she wanted. She was described by a Mesopotamian cuneiform tablet.

What is the nature of science?

- Scientific knowledge is **stable, but always being refined.**
(As new data is found, new conclusions can be made!)
- The only scientific facts are **observed** and **measured**

Sep 9-8:38 AM

Define the following terms:

- Qualitative Observation: **A description of the object made using our five senses.**
Example: _____
- Quantitative Observation: **A numerical description of the object made using instruments.**
Example: _____
- Inference: **A conclusion made based on your observations.**
Example: _____

Sep 9-10:19 AM

What are the standard units we will use in chemistry?

Meter		Joule	
Gram		Second	
Pascal		Liter	
Kelvin		Parts per Million	
Mole		Molarity	

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How can units be adjusted to fit really large or really small numbers?

Kilo-		
Base		
Deci-		
Centi-		
Milli-		
Micro-		
Nano-		
Pico-		

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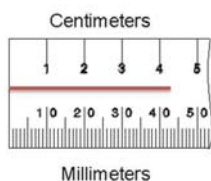
Let's practice converting between metric units.

Sep 9-10:31 AM

How do I properly make a measurement?

1. Measurements are always made using all of the numbers we are sure of from reading the device

AND one estimated value (between markings)



Sep 9-10:21 AM

Let's practice making measurements.

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