

# M01 Lab

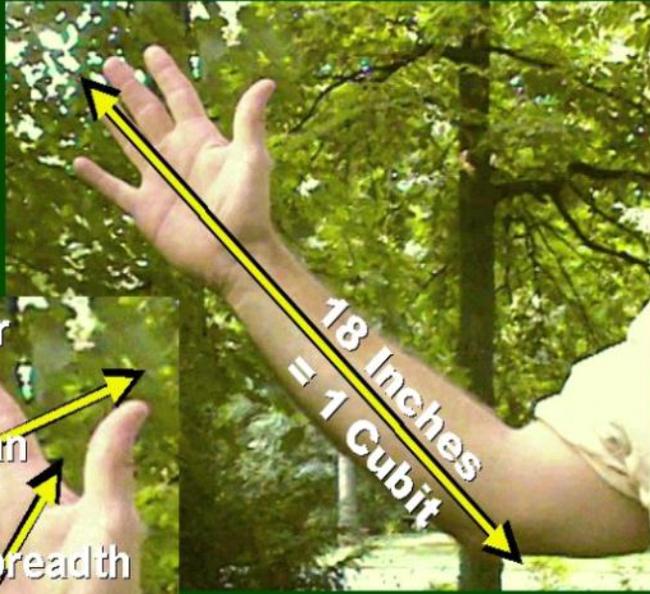
Wednesday, June 01, 2011

3:25 PM

VoiceThread <http://voicethread.com/share/2202469/>

Slide	Notes
	<p><b>EXPERIMENT 1.1</b></p> <p><b>Atoms and Molecules</b></p> <p>Observation of electrolysis</p> <p><b>Setting up the Apparatus:</b></p> <p>I filled the small glass <math>\frac{3}{4}</math> full of tap water and added a teaspoon of baking soda and stirred vigorously.</p> <p>I prepared the wire by using scissors to strip the insulation off of both ends of the copper wire.</p> <p>I connected the end of one wire to one of the two terminals on the battery by wrapping it a bit and taping it in place. Then I repeated the process with the other wire to the other terminal.</p> <p>I immersed the wires in the baking soda/water solution so that the bare wire was totally submerged for both wires.</p> <p><b>Observing:</b></p> <p>I recorded observations of what happened and after ten minutes I Noted what terminal the wire had been attached to on the battery, I observed the ends of the wires that had been submerged and the color of the solution.</p> <p>[place your observations here]</p>

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**Length Measurement**

**Lab 1.2 Cubits and Fingers**

**Setting up the Cubit and Finger Measurement Strings:**

I bent my arm at the elbow and opened my hand until the fingers were straight. My helper stretched the string from my elbow to the tip of my longest finger. The string was cut to that length. This will be my cubit measuring string.

Then I had my helper cut a string that measured from the tip of my index finger to the knuckle nearest the finger tip (fingernail length was ignored). This will be my finger measurement.

**Setting up the Conversion Factor:**

Next, I taped down the cubit measure straight across the table top. I used the finger to see how many fingers were in a cubit by marking each finger length on the cubit string using a pencil.

**Measuring the Table**

I used the cubit string and then the finger string to measure the table top length and width.

Data:

	Cubits	Fingers
Length of the table in ...		
Width of table in ...		

**Compare the Actual Measurements to a Mathematical Calculation Using the Factor-Label Method:**

Table Length Factor-Label Conversion of Cubits to Fingers:

[put you math in here]

Table Width Factor-Label Conversion of Cubits to Finger:

[put your math in here]



## Modern Day Noah



1/14th the volume of the real thing



[http://www.youtube.com/watch?v=RI9oFHRJGkE&feature=player\\_embedded](http://www.youtube.com/watch?v=RI9oFHRJGkE&feature=player_embedded)

Cubits was used a very long time ago as a means of measuring things. The Ark was built in cubits.

This fellow from the Netherlands build a replica that is 1/14th the volume of the real Noah's Ark.

## Lab 1.2 Concentration



## Lab 1.3: Concentration

I arranged my three glasses on a tabletop or countertop, putting 1 cup of vinegar in the first glass,  $\frac{1}{2}$  cup of vinegar in the second glass, and  $\frac{1}{4}$  cup in the third. Next, I placed a Tums tablet in each glass. I

noted what I saw, observing any differences or lack of differences. After I had finished observing, I poured out the contents of each glass and rinsed each glass thoroughly. I dried the glasses and set them back on the counter.

Next, I poured 1 cup of water in the first glass,  $1\frac{1}{2}$  cups of water in the second glass, and  $1\frac{3}{4}$  cups of water in the third glass, so that each glass had a total of 2 cups of liquid in it. Using the spoon, I stirred the contents of each glass thoroughly. Then, I placed a single Tums tablet in each glass. Again, I noted what I saw, observing any differences or lack of differences.