PRE-LAB EXPERIMENT 1

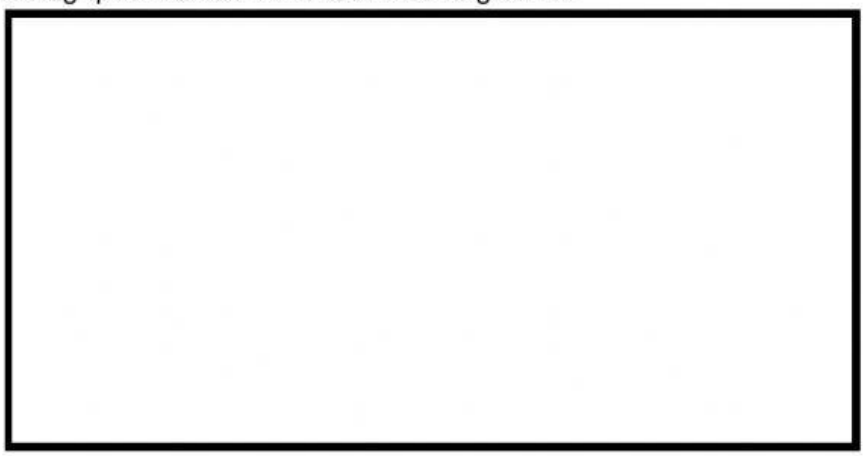
Acquire the correct techniques in using laboratory apparatus.

DENSITY

Density is _____ of an object divide by its _____. The density of water is ___ g/cm^3.

MEASURING CYLINDER

Answer the following questions based on the following video.



1. Measuring cylinder is used for _____ where approximate volumes are required.

2. Number the following in correct STEPS of using measuring cylinder.

	Fill the cylinder with the solution to the required level.
	Take the bottom of the meniscus that aligns with the graduated mark at eye level as the reading.
	Rinse with distilled water before use.

LIVEWORKSHEETS

PIPETTE

Answer the following questions based on the following video.

1. Pipette is used to transfer an _____ and _____ volume of a solution.

2. How many variations of pipette? Answer: _____.

3. The following apparatus use to drawn solution into the pipette. Name the apparatus.





4. Match the specific part of pipette bulb with its correct function.

A: Evacuate valve	To draw the solution into the pipette.
S: Suction valve	To drain solution from pipette.
E: Empty valve	To release air out of the bulb.

LIVEWORKSHEETS

5. Number the following in correct STEPS of rinsing the pipette with distilled water.

	Gently place the bulb onto the top of pipette.
	Draw a small amount of distilled water into the pipette.
	Press A and simultaneously squeeze the bulb to release air out of the bulb.
	Position the pipette horizontally and rotate it so the inner wall of the pipette will cover by distilled water.
	Discard the distilled water.
	Remove the pipette bulb and closed the opening with the thumb.

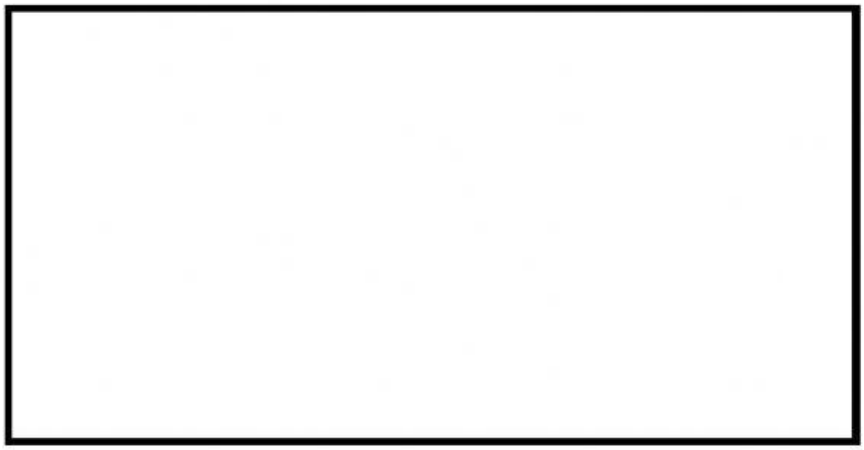
6. Number the following in correct STEPS of transferring the solution using pipette.

	Remove the pipette bulb and closed the opening with the thumb to adjust the level of the solution to the calibrated mark.
	Dip the tip of the pipette into the solution.
	Draw the solution above the calibrated mark.
	Touch the tip of the pipette to wall of the flask to allow the remaining solution to drain.
	Transfer the solution into a flask by holding the pipette vertically until the solution completely drain out.
	Pour a solution into a beaker.

BURETTE

Answer the following questions based on the following video.

LIVEWORKSHEETS



1. Burette is used to _____ solution in precise volume.

2. Number the following in correct STEPS of rinsing the burette.

	Closed the stop cork at the bottom of the burette.
	Open the stop cork and discard the distilled water.
	Insert the funnel into the top of the burette.
	Turn the burette into horizontal position and rotate the burette so that the distilled water covers the inner wall of the burette.
	Secure the burette in upright position using the burette clamp.
	Repeat the step to rinse the burette with the solution to used.
	Fill approximately 5-10 mL of distilled water into the burette using a filter funnel.

6. Number the following in correct STEPS in using the burette.

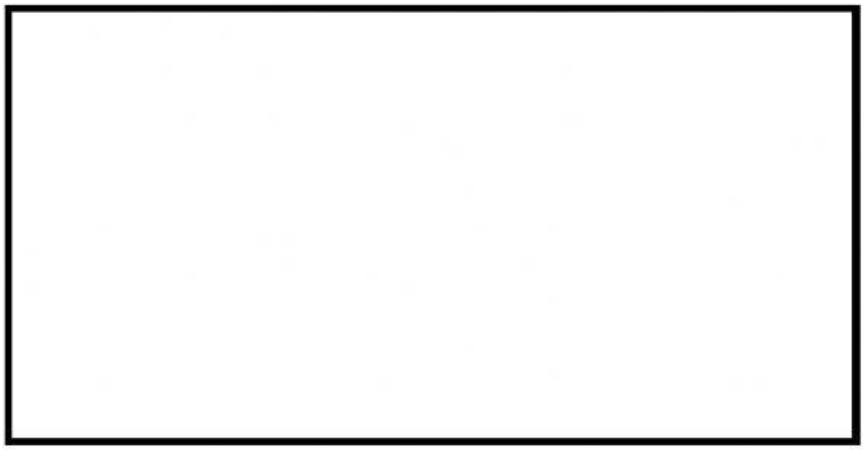
LIVEWORKSHEETS

	Place an empty beaker underneath the tip of the burette.
	Record the initial reading to two decimal places.
	Pour the solution in from the top using a filter funnel.
	Fill the burette up to 0.00 graduation mark.
	Discard the solution.
	Check for the air bubbles and remove it if present.
	Record the final reading.
	Closed the stop cock.
	Remove the filter funnel.
	Clamp the burette vertically to a retort stand.
	Turn the stop cock so that the burette tip fill with solution.

ANALYTICAL BALANCE

Answer the following questions based on the following video.

LIVEWORKSHEETS



1. Analytical balance is used to _____ a mass of substance.

2. Number the following in correct STEPS of using the analytical balance.

	Press TARE button to cancel the weight of beaker.
	Turn the power on.
	Carefully place the chemical to be weight.
	Ready to used when the display show 0.000 g.
	Record the mass in 4 decimal places.
	Gently closed the sliding door and wait the reading to stabilized.
	Closed all door.
	Open one of the side doors and place the empty beaker.

LIVEWORKSHEETS