



Activity 3.1.1 Lab Tech Training

Purpose

In a science lab, you may notice many pieces of equipment and tools. Each piece of equipment has specific uses. Laboratory technicians must know the appropriate uses. When setting up a lab, when do you use a beaker versus a graduated cylinder? What are appropriate instruments to use for measuring volume versus length?

Safety is a primary concern of laboratory technicians and they must have an attitude of safety when working. One component of an attitude of safety is knowing and using the right tool for the job. Another is wearing the appropriate personal protective equipment for the materials you will be using. Training for laboratory technicians is an extensive journey and today you will begin that journey.

Materials

Per class:

Apron	LabQuest2
Alcohol burner	Microscope
Beaker	Petri dish
Beaker tongs	Pipette
Burette clamp	Ring stand
Dissection kit	Safety glasses
Dropper	Sensor
Electronic balance	Support ring
Gloves	Test tube
Graduated cylinder	Thermometer

Per student:

<i>Lab Equipment Note Card</i>	<i>Agriscience Notebook</i>
Pencil	

Procedure

Your teacher will provide you with a note card describing one lab equipment item. You will use the clues to determine which item from the supply table matches your description and then present your item to the class.

Part One – What am I?

Read your note card and determine which item you have. Use the Materials list to help determine the proper name of the item. Once you have found your item, answer the following analysis questions. Be very descriptive in your answers.

What does the item look like?

The petri dish looks almost like a lid for a bottle.

What is the item used for? I.E. – Safety, measurement, container, support or movement, etc.

This item is used to culture microbial colonies.

Part Two – Sharing

When called upon by your teacher, you will read the clues from your card to the class. The class will use the clues to determine the item you are describing. After the class has correctly guessed your item, share your answers to the two questions from Part One.

As your classmates share their items, record what each item is, looks like, and is used for on *Activity 3.1.1 Student Worksheet*.

Conclusion

1. Why is knowing what items look like and how they are used important for laboratory safety?

Knowing what items look like will help you remember what they are and what they are used for. All of these items are used maximize efficiency and maximize the protection.

2. What are three items used for measurement?

Graduated cylinder, pipette, and sensor.

3. What are three items used for collecting data?

LabQuest2, microscope, thermometer.

Name _____

Activity 3.1.1 Student Worksheet

Directions: Record the name of each item of laboratory equipment you and your classmates present. Describe each item in the *Looks Like* column and list the uses for each item in the *Uses* column. Keep this worksheet in your *Agriscience Notebook* as a reference for laboratory activities throughout the year.

Lab Equipment	Looks Like	Uses
Beaker	Measuring cup	Hold and measure liquid
Petri Dish	Plastic lid	Used to culture microbial colonies
Test Tube	Lip gloss container	Hold liquids in small quantities
Graduated Cylinder	Very tall cup	Provides accurate measurement of liquids
Apron	Tarp/Bag	Protect clothes and body
Dissection Kit	Dentists tools	Dissect specimens
LabQuest2	Calculator	Observations and collecting data
Sensor	HDMI cord	Used with data collection with LabQuest2
Ring Stand	Lamp without shade	Suspend and secure items
Support Ring	Magnifying glass	Support or suspend items
Scale	Morse code machine	Used to determine mass
Gloves	Hand	Protects hands and skin
Microscope	Mini telescope	Magnify very small objects
Beaker Tongs	Tongs	Carry hot objects
Dropper	Turkey Baster	Used to transfer liquids with low accuracy
Pipette	Plastic liquid pen	Transfer liquids with high accuracy
Safety Glasses	Over-sized glasses	Protects eyes
Thermometer	Ruler	Measures temperature