

CASE

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

Per student:

- *Lab Equipment Note Card*
- *Agriscience Notebook*
- 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?

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

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?

So you can find them fast and easy.

2. What are three items used for measurement?

graduated cylinder, beaker, electronic balance

3. What are three items used for collecting data?

lab quest,

sensor,

electronic balance

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
apron	rubber coat that covers your body	protect clothes and body
alcohol beaker	glass	produce heat
beaker	glass	holds liquids, not very accurate
beaker tongs	tongs used for food	to carry hot glassware
burette clamp	metal	used with ring stand to support large items
dissection kit	tools inside of a bag/box held together	dissect specimens
dropper	small, plastic, black top	used to transfer liquids
electronic balance	looks like a scale	used to determine mass
gloves	rubber gloves	protects hands and keeps our germs from getting on other things
graduated cylinder	glass	measure liquids, high accuracy
labquest2	looks like a computer	collect data
microscope	metal	you can see small objects
petri dish	small bowls	culture microbial colonies
pipette	clear and small	individual drops
ring stand	metal pole with rings on it	support stand
safety glasses	clear glass/plastic that covers eyes	protects eyes
sensor	wires	used with labquest

thermometer	skinny pole, has F and C	measure temperature
support ring	metal ring	holding the test tube
test tube	glass/plastic	holds liquids