| lame | Date |
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LAB EQUIPMENT QUIZ -Answer Key

1. Identify the laboratory equipment shown in the picture and write down its main function:

| Equipment | Name | Function |
|----------------|--------------------------------------|--|
| | Tongs | Used to safety hold corrosive or hot solids |
| | Round-bottomed flask | Used when heating liquid substances, as it provides uniform heat distribution to prevent the flask from cracking due to expansion. |
| | Erlenmeyer flask or Conical flask | Used for general laboratory experiments and for measuring approximate volumes of liquids |
| | Pipette | Used to deliver a specified volume of liquid accurately |
| 888-896 | Dessicator | Used for drying or keeping substances free from moisture |
| | Seperating funnel | Used for separating immiscible liquids |
| | Spotting tile | Used to observe color changes in micro quantities of liquids |

| | Thistle funnel | Used for delivering liquid substances in reaction vessels |
|---------|------------------|--|
| 43.88 g | Weighing balance | Used to measure the mass of substances accurately. |
| | Goggles | Used for eye protection against chemical splashes, debris, or other hazards. |
| | Clamp and stand | Used for holding and supporting pieces of apparatus during experiments |
| | Mortar and Peste | Used for crushing substances |
| | Bunsen burner | Source of heat in the laboratory |
| | Dropper | Used for delivering liquids drop-wise |
| | Filter funnel | Used for delivering liquids carefully into vessels |

2. Indicate the apparatus that would be useful for each of the following tasks. Hint is given in italics:

| Task | Apparatus |
|--|----------------------|
| Used for even distribution of heat | Wire Gauze |
| when heating substances in beakers | |
| or flasks (rwei zeagu) | |
| | Beaker |
| Holding 100mL of water (ebkare) | |
| A narrow-mouthed container used to | Erlenmeyer flask |
| transport, heat or store substances, | |
| often used when a stopper is required | |
| (ymerereel kslaf) | |
| Used to grind chemicals to powder | Moartar and Pestle |
| (tmraor nda stlepe) | |
| Used as a surface to evaporate a | Watch glass |
| liquid, as a cover for a beaker, or to | |
| hold solids while being weighed | |
| (tahcw sgasl) | |
| Holding many test tubes filled with | Testtube rack |
| chemicals (estt ubet karc) | |
| | Graduated cylinder |
| Measuring 27 mL of liquid (daudgtear | |
| Idnreiyc) | |
| Used for separating immiscible liquids | Separating funnel |
| (laef ginen snprutn) | |
| Protects the eyes from flying objects | Goggles |
| or chemical splashes (ggloges) | |
| Used when heating liquid substances | Round-bottemed flask |
| because heat is supplied uniformly so | |
| that the flask doesn't crack as it | |
| expands (bfka benttl doso dulrl) | |
| | Burette |
| Measuring exactly 43mL of an acid | |
| (tretube) | |
| | |

- Identify the most suitable laboratory equipment that the following students
 can use in each scenario to successfully carry out the described lab
 activities:
- a. Emily was heating a test tube over a Bunsen burner when the test tube shattered. What safety equipment could have protected her from potential injuries?

Safety goggles, heat-resistant gloves.

b. Sarah needs to transfer a hot crucible from the furnace to a desiccator. Which lab equipment would be most suitable for safely handling the crucible?

Tongs

c. Emily needs to support a crucible over a Bunsen burner flame for heating. Which lab equipment would provide stable support for the crucible?

Pipe-clay triangle

d. Max needs a suitable surface to let him evaporate a liquid slowly to observe the formation of crystals. Which lab equipment would allow him to evaporate the liquid evenly?

Watch glass

e. Ethan is conducting a laboratory experiment that requires continuous stirring of a solution. Which lab equipment would provide consistent stirring without manual intervention?

Magnetic stir bar

f. Chloe needs to measure the pH of a solution accurately. Which lab equipment would allow her to measure the pH precisely?

pH meter

g. In a past separation of mixtures lesson, Sarah needed to separate two immiscible liquids with different densities. Which lab equipment would allow her to perform the separation efficiently?

Seperating funnel

h. Paul needs to hold substances being burned in gas jars to observe their combustion properties. Which lab equipment would be most suitable for this purpose?

Deflagrating spoon

i. Jack needs to add water to vessels with narrow necks without spilling. Which lab equipment would allow him to control the flow of water precisely?

Wash bottle