

Techniques

Chemical waste should be disposed of by

- A) Hiding it in someone else's locker.
 - B) Putting it into a hazardous waste container.**
 - C) Putting it into a garbage can.
 - D) Pouring it in the sink.
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Techniques

You should prepare for the lab by

- A) Reading the experiment carefully when you enter the lab.
 - B) Washing your hands well before starting the experiment.
 - C) Listening well to other students discussing the experiment.
 - D) Reading the assigned experiment before coming to the lab.**
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1 تجربة

Which of the following observations is correct when methane burns in Bunsen burner with sufficient oxygen?

- A) Hot, luminous blue flame and $\text{CO}_2(\text{g}) + \text{H}_2\text{O}(\text{g})$
 - B) Luminous yellow flame and $\text{C}(\text{s}) + \text{CO}(\text{g}) + \text{CO}_2(\text{g}) + \text{H}_2\text{O}(\text{g})$
 - C) Hot, luminous yellow flame and $\text{CO}_2(\text{g})$
 - D) Hot, non luminous blue flame and $\text{CO}_2(\text{g}) + \text{H}_2\text{O}(\text{g})$**
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Techniques

What should you always do before leaving the lab?

- A) Wash and dry your lab table.
- B) Put your goggles away neatly in the goggle cabinet.
- C) Place all equipment back from where you got it.
- D) Wash your hands.

E) All of the above.

تجربة 2

When two aqueous solutions of **barium chloride** and **sodium sulfate** are mixed together, the observation of occurrence of a reaction is

- A) Evolution of a gas with odor
- B) Evolution of a gas with without odor

C) Formation of a white precipitate

D) Nothing changed

E) None of these

تجربة 1

To determine the density of an irregularly shaped metal, a student immersed the object in 21.2 mL of H₂O in a graduated cylinder, causing the level of the H₂O to rise to 27.8 mL. If the object had a mass of 22.40 g, what was the density of the metal in proper significant figures?

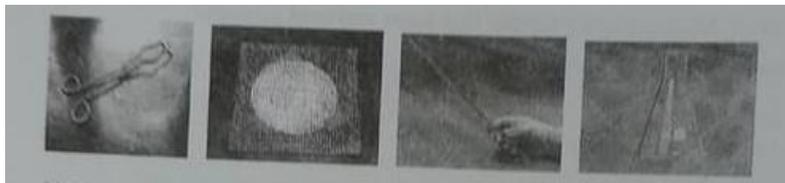
- A) 1.28 g/mL
 - B) 3.4 g/mL**
 - C) 2.7 g/mL
 - D) 3.39 g/mL
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تجربة 2 Techniques

If you are instructed to smell a chemical in the lab, you need to

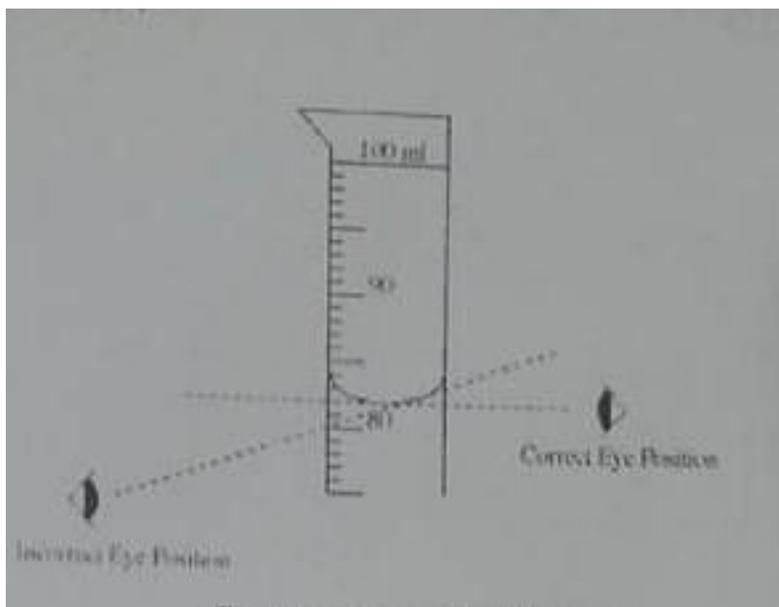
- A) Fan the air above the chemical toward your nose.**
 - B) Bring the chemical close to your nose and inhale deeply.
 - C) Stir and shake the chemical well to allow the odor to come out.
 - D) Add water before you smell it.
 - E) Close your eyes during sniffing.
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The names of the following equipments respectively from left to right are:



- A) Pipette, wire gauze, crucible tong and Erlenmeyer flask.
 B) Wire gauze, crucible tong, Erlenmeyer flask and pipette.
 C) Erlenmeyer flask, pipette, wire gauze and crucible tong.
D) Crucible tong, wire gauze, pipette and Erlenmeyer flask.
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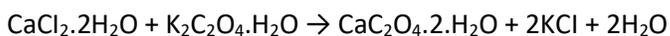
تجربة 1 Techniques 1



- A) The correct reading of this volume would be 81.0 mL.
 B) The correct reading of this volume would be 83.0 mL.
 C) The correct reading of this volume would be 82 mL. لازم بالصيغة العلمية الاجابة
 C) The correct reading of this volume would be 84.0 mL.
E) The correct reading of this volume would be 82.0 mL. الاجابة الصحيحة
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تجربة 3 Limiting Reactant Experiment 3

In the "Limiting Reactant Experiment", a 0.538 g sample of $\text{CaC}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$ and $\text{K}_2\text{C}_2\text{O}_4 \cdot \text{H}_2\text{O}$ solid salt mixture is dissolved in about 150 mL of demonized water and after drying, a 0.194 g of the product $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ (molar mass = 146.12 g/mol) is measured. Tests revealed that $\text{K}_2\text{C}_2\text{O}_4 \cdot \text{H}_2\text{O}$ (molar mass = 184.24 g/mol) was the limiting reactant.



What is the percent composition of the limiting reactant?

- A) 91.0%
 - B) 68/3%
 - C) 57.0%
 - D) 45.5%**
 - E) 22.8%
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تجربة 3 Limiting Reactant Experiment

In the "Limiting Reactant Experiment" if the step for digesting the precipitate were **omitted**)
شورح يصير محذوفة, يعني لو لغينا خطوة الهضم (شو رح يصير محذوفة, will the reported percent limiting reactant in the mixture be

- A) Unaffected
 - B) Too high
 - C) too low**
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تجربة 3 Limiting Reactant Experiment

Which of the following statements is correct concerning the limiting?

- A) The volume of deionized water (150 mL) used to dissolve the unknown solid mixture should be measured accurately.
 - B) The precipitate is dried in the oven at 70°C for 30 minutes.
 - C) The mass percent of the limiting reactant will be higher than the actual value if the precipitate was not completely dried.
 - D) The precipitate is rinsed with 5 mL portion of cold water.
 - E) All of the above statements are correct.
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تجربة 1

A balance has a precision of ± 0.001 g. A sample weighs about 8 g on this balance. How many significant figures should be reported for this measurement?

- A) 4**
- B) 3

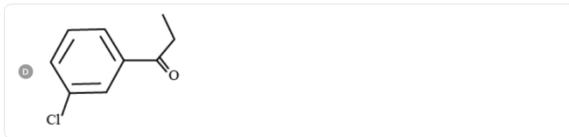
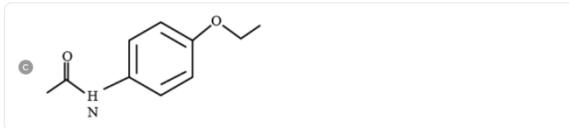
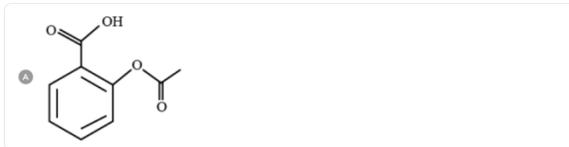
C) 2

D) 1

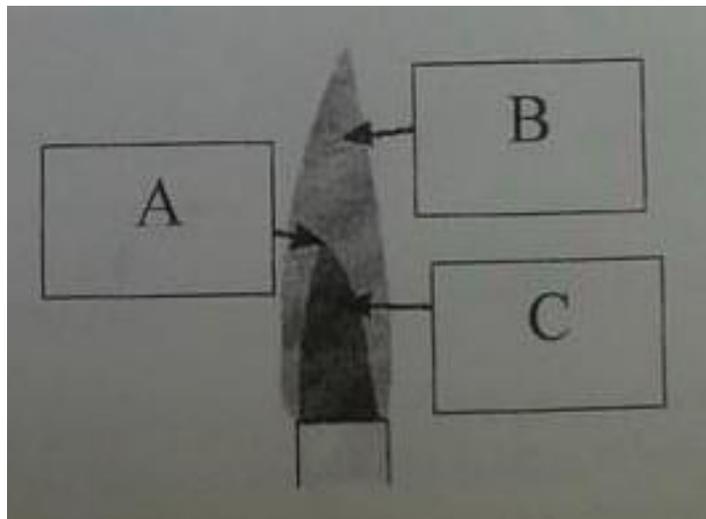
E) None of these.

تجربة 1

The structure of aspirin: **(A)**



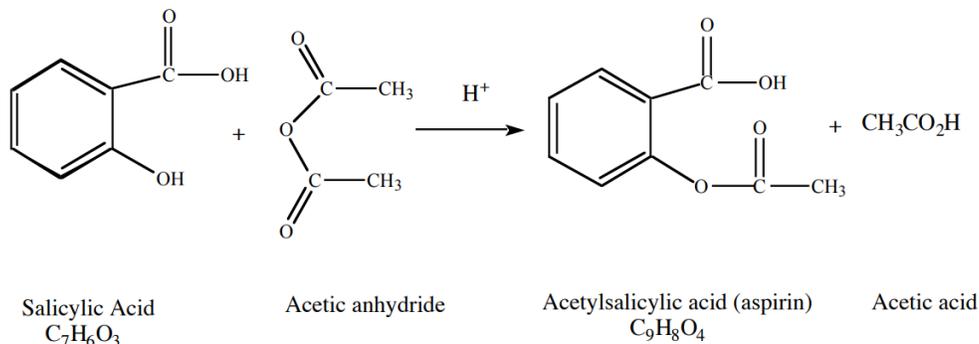
Which letter represents the hottest region of this Bunsen burner flame **its A**



The reason of clean and dry Erlenmeyer flask in **Aspirin experiments**:

- A) **To prevent destroying acetic anhydride before starting the experiments**
 - B) To destroy acetic anhydride
 - C) To get aspirin easily
 - D) None of these
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مهم جدا صيغة كل مادة متفاعلة و مادة ناتجة لتجربة تحضير الاسبرين



After get the precipitate from aspirin experiment:

- A) Filtrate it with simple filtration and drying it
- B) Washing it with HCl
- C) **Filtrate it with suction filtration (vacuum filtration) then drying it.**
- D) Washing it with tap water and then distilled water then drying it.



What was the limiting reactant in laboratory work in Aspirin experiment?

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- A) Aspirin
- B) **Salicylic acid**
- C) Acetic anhydride
- D) Acetic acid