

# Chem Bell Work, August 14 – 17, 2017

Safety, Measurement

# Bell Work, Monday, Aug 14



## 1. When is it okay to work alone in the lab?

- a. Never
- b. Always
- c. If it is okay with your lab partner.
- d. d. Sometimes
- e. None of the above.

## 2. What should you do before the lab begins?

- a. Always listen to directions given in class
- b. Read the instructions or handout.
- c. Gather up lab supplies
- d. a & b
- e. a & c

# Bell Work, Monday, Aug 14



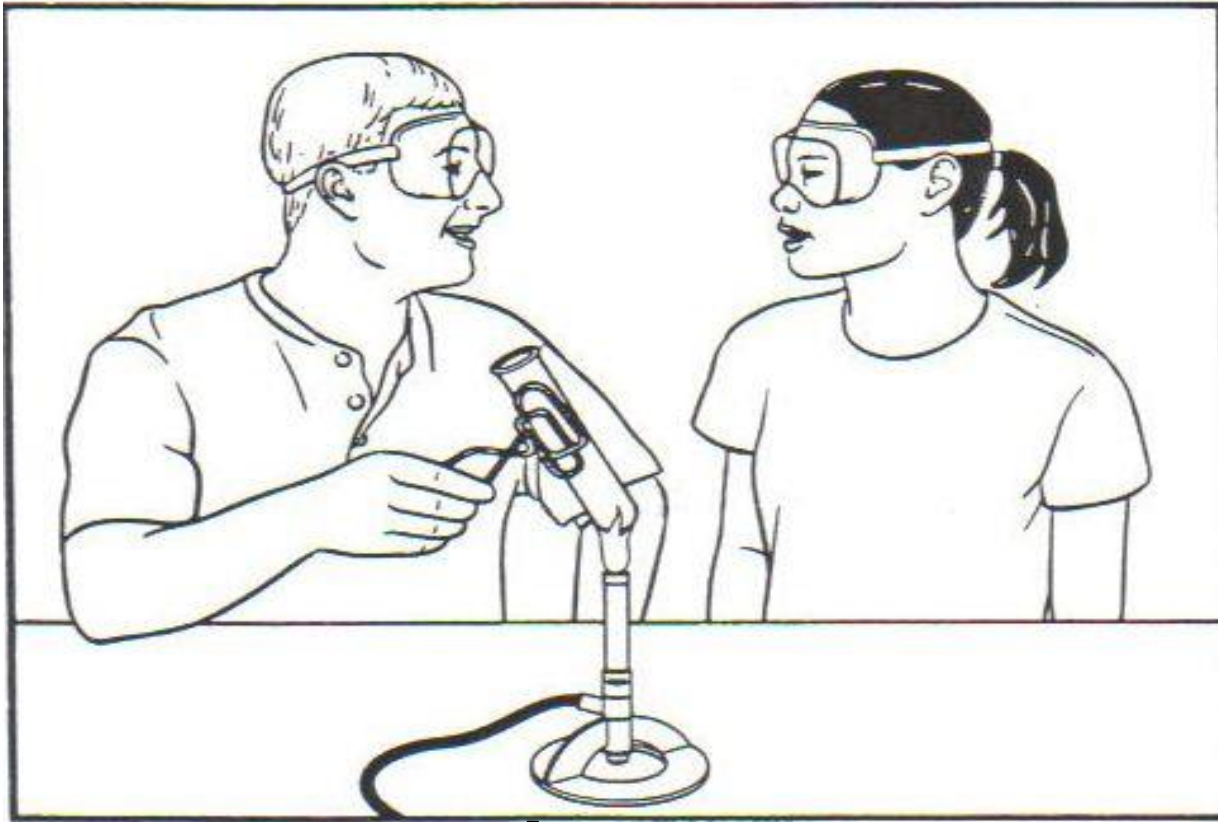
**3. If your lab partner gets something in his or her eyes you should do all the following except**

- a. Bring your partner to the eyewash station.
- b. Tell your partner to go to eyewash station while you continue to work on the experiment.**
- c. Help your partner flush their eyes.
- d. Tell teacher.
- e. All answers are correct.

**4. At the end of lab I should**

- a. Clean up my work area.**
- b. Leave everything for the next class
- c. Follow teachers instructions.**
- d. Answers a & c are correct.**

# Bell Work, Tuesday, Aug 15

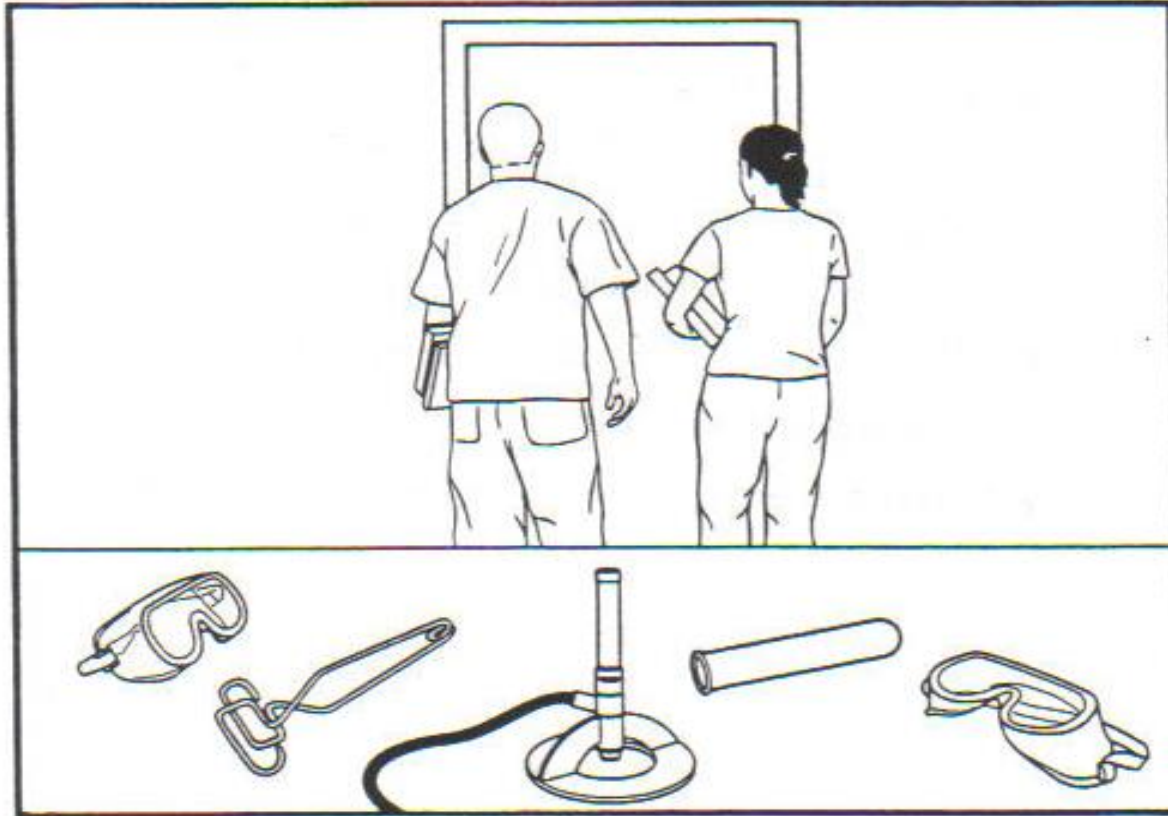


**picture 1**

**DO NOT DRAW  
THE  
PICTURES**

1. Explain what safety rule(s) these students are violating in picture 1?

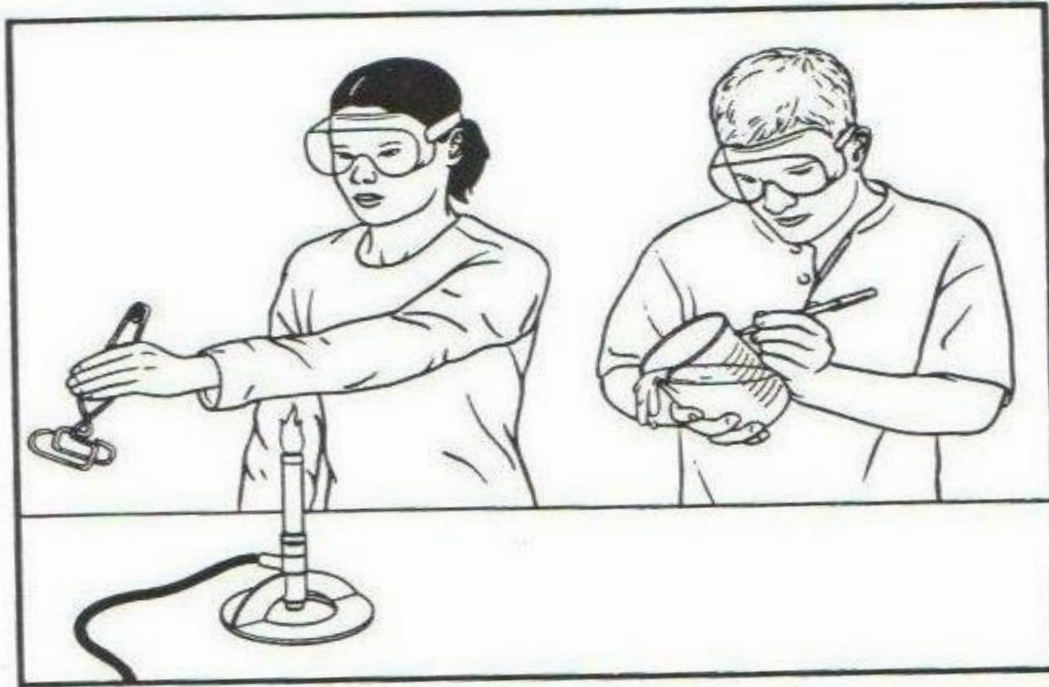
# Bell Work, Tuesday, Aug 15



**picture 2**

**2. Explain what safety rule(s) these students are violating in the picture 2?**

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15

**picture 3**

3. Explain what safety rule(s) these students are violating in picture 3?

# Bell Work, Tuesday, Aug 15



**picture 4**

**4. Explain what safety rule(s) this student is violating in picture 4?**

# Answers Bell Work, Tuesday, Aug 15

## 1. picture 1:

- **The students are not paying attention to what they are doing.**
- They are socializing instead of paying attention to what they are doing.
- **He is pointing the test tube at his face.**
- **Never point the end of a test tube or any other container towards yourself and other people.**

## 2. Picture 2:

- **Clean up before you leave the lab.**



# Answers Bell Work, Tuesday, Aug 15

## 3. Picture 3:

- **The girl has her arm over the flame.**
- The boy is not being careful because he is spilling liquid from his beaker.

## 4. Picture 4:

- **She is not wearing goggles.**
- **There are unnecessary items are on the lab table.**
- **She is working alone.**

# Chem, Bell Work, Wednesday, Aug 16

1. Fill in the blanks: **Math is about numbers and**  
(a)

**science is about measurements.**  
(b)

2. A football field is 100 yards long. What is the quantity (property) being measured?

**The length of the football field or distance.**

3. What are the units of measurement?

**Yards.**

4. What is the magnitude (size) of the measurement?

**100**

5. What is the measurement?

**100 yards** is the measurement.

# Chem, Bell Work, Thursday, Aug 17

## 1. What is meant by precision or precise measurements?

- **Precision refers to the closeness of a set of measurements.**
- ***Precision is the ability reproduce a measurement.***  
(ex: 1.49, 1.48, 1.51, 1.52 are close to 1.50)
- *If we weigh a 1.5 kilograms bag of sugar five times, each weight is close to 1.5 kg:*
- *Example: 1.51 kg, 1.51 kg, 1.50kg, 1.49 kg, 1.49 kg*

## 2. What is meant by accuracy or accurate measurements?

**Accuracy refers to the closeness of measurements to the correct or accepted value of the quantity measured.**

- Example: the true value of mass of the sugar is 1.5 kilograms so a measurement close to 1.5 kg is accurate.