

SAFETY IN THE LAB

Name: _____

Lab Partner(s): _____

Lab Section: _____

Laboratory classes offer students hands-on experience engaging with course concepts and exploring scientific methods. Unlike what you would expect of a standard classroom, laboratory environments present their own unique challenges and opportunities.

In these materials, you'll find a series of 6 scenarios depicting behaviors that could occur in a school laboratory setting.

Each group (there will be 6 groups) will be assigned a scenario. You and your group will study what is going on in the lab for your scenario looking for what the students are doing correctly and what they are doing that is unsafe.

You will then address the questions under the picture and answer – in detail – the questions on the poster paper the instructor hands out.

Post your answers.

Once all of the posters have been posted, go around the room. Study each of the 6 scenarios (one at a time). Look at the questions and the responses from the group assigned to that scenario. In the space provided at the end of this lab packet for each of the questions right down whether or not you agree with their responses and explain why you do agree. If you disagree, explain what YOU think they SHOULD have said for the answer.

You may use loose-leaf paper to answer questions.



1. List 2 unsafe activities depicted in this illustration and explain how they should be altered to make them safe.
2. What piece of safety equipment should be used to put out the fire?



1. How should Rick correct his technique?
2. Are these students behaving appropriately? If not, what should they be doing differently?

Panel 3



1. Compare Evelyn's technique with Kwan's technique.
2. Whose technique is the correct one?

Panel 4



1. Identify 3 unsafe activities shown here.
2. Explain alternate procedures for each activity you identify.



1. Describe Jarvis' error. Who in this scenario is performing a correct procedure?
2. Identify 2 unsafe activities shown here.



1. What is unsafe about Ernie's behavior?
2. Why is Lydia's behavior appropriate? Why is it important in a laboratory setting?

Panel 1: List 2 unsafe activities depicted in this illustration and explain how they should be altered to make them safe.

What piece of safety equipment should be used to put out the fire?

Panel 2: How should Rick correct his technique?

Are these students behaving appropriately? If not, what should they be doing differently?

Panel 3: Compare Evelyn's technique with Kwan's technique.

Evelyn is pipetting to transfer liquids between containers whose contents are known. Kwan is mouth pipetting the contents between containers. Whose technique is the correct one? Why?

Panel 4 : Identify 3 unsafe activities shown here.

Explain alternate procedures for each activity you identify.

Panel 5: Describe Jarvis' error. Who in this scenario is performing a correct procedure?

Identify 2 unsafe activities shown here.

Panel 6: What is unsafe about Ernie's behavior?

Why is Lydia's behavior appropriate? Why is it important in a laboratory setting?
