Lab Safety

Lab Safety Demonstration: https://www.youtube.com/watch?v=cr7roogzM8c (Copy and paste if video is not playing)

**Part I.** Write and answer the following questions in a complete sentence.

1. What are the proper practices for working safely in a science laboratory?

2. Why might be drinking or eating in the laboratory be dangerous?

3. How can reading through the entire investigation before beginning the procedure help prevent accident?

4. What safety procedure should you follow when cleaning up at the end of an investigation?

**Part II.**

http://expedioscientiam.net/school/resources/what\_not\_to\_do\_600.pdf (Copy and paste if you can't view)

**Part III**

Lab Safety Activity

**Read this story carefully about Bob and friends, then see the back for further directions.**

Bob, Patrick, and Gary were thrilled when Mr. Kruss gave their teacher a chemistry set! Mr. Kruss warned them to be careful and reminded them to follow the safety rules they had learned in science class. The teacher passed out the materials and provided each person with an experiment book.

Bob and Gary flipped through the book and decided to test the properties of a mystery substance. Since the teacher did not tell them to wear the safety goggles, they left them on the table. Bob lit the Bunsen burner and then reached across the flame to get a test tube from Gary. In the process, he knocked over a bottle of the mystery substance and a little bit splashed on Gary. Bob poured some of the substance into a test tube and began to heat it. When it started to bubble he looked into the test tube to see what was happening and pointed it towards Gary so he could see. Gary thought it smelled weird so he took a deep whiff of it. He didn’t think it smelled poisonous and tasted a little bit of the substance. They were worried about running out of time, so they left the test tube and materials on the table and moved to a different station to try another experiment.

Patrick didn’t want to waste any time reading the directions, so he put on some safety goggles and picked a couple different substances. He tested them with vinegar (a weak acid) to see what would happen even though he didn’t have permission to experiment on his own. He noticed that one of the substances did not do anything, but the other one fizzed. He also mixed two substances together to see what would happen, but didn’t notice anything. He saw Bob and Gary heating something in a test tube and decided to do that test. He ran over to that station and knocked over a couple bottles that Bob had left open. After cleaning up the spills, he read the directions and found the materials he needed. The only test tube he could find had a small crack in it, but he decided to use it anyway. He lit the Bunsen burner and used tongs to hold the test tube over the flame. He forgot to move his notebook away from the flame and almost caught it on fire.

Before they could do another experiment, the bell rang and they rushed to put everything away. Since they didn’t have much time, Patrick didn’t clean out his test tube before putting it in the cabinet. Bob noticed that he had a small cut on his finger, but decided he didn’t have time to tell the teacher about it. Since they were late, they skipped washing their hands and hurried to the next class.

**For each one, find a sentence or example from the story that has to do with a violation of that specific rule, guideline or concern.**

**Then write the example down on your paper.** Also **describe what Bob and his friends should have done, or how the problem could have been fixed or avoided.**