



Purpose: To familiarize yourself with lab safely protocol and the procedures, layout and methodology of this classroom.

Flinn Scientific Student Safety Contract (read through entire contract)

1. How should your work area be kept?
2. What behaviors are considered dangerous & prohibited in the lab?
3. What are your procedures/policies are you agreeing to by signing the student contract?
4. Why should you examine glassware before each use?
5. What is never removed from the laboratory?
6. Describe proper dress code in the lab.
7. Why do you think you should never return unused chemicals to their original containers? How is chemical waste properly disposed?
8. What should you do in the case of any accident (spill, breakage, etc.) or injury (cut, burn, etc.) no matter how trivial it may appear?
9. In addition to yourself, who else must read and sign the safety contract?
10. What cautions must be exercised when using a gas burner?

Lab Equipment Stations

1. Using lab equipment marked #4 transfer exactly 2.5 ml of red liquid into the glass beaker. Demonstrate this technique to your teacher to correct methodology. What should you do if you accidentally break the beaker?
2. Find one of the digital microscopes and place the objective lens to red. Calculate the total magnification by multiplying the ocular lens by the red objective lens.
3. Read the information sheet for the digital microscope. Follow the instructions. Sketch field of view.
4. Examine the digital probe labeled #3. Describe the uses and functions of the LabQuest 2. Follow the instructions at the station carefully and return all items to homeostasis before you leave the station. Record your data and answers here per instructions for station.
5. When would you use lab safety equipment #5?
6. Turn on digital scale (equipment #1). Place the measuring boat on the scale and press "zero". Measure out 3.8 grams of salt. What is the mass of the boat? Next, remove the boat and scale and describe what occurs when you wave your hands just above the scale.
7. Find the lab equipment marked with #2. What is the name and function of this apparatus? Follow the instructions and answer the questions on the sheet that accompanies this station.
8. Examine the item labeled #11. Follow the instructions for the hydrometer on the information sheet.
9. When would you use lab safety equipment #6?
10. Identify the glassware labeled #7 -9.
11. Find the two lab items marked with #10. Which do you feel is potentially more dangerous and why?

Becoming Familiar with your Textbook

1. Refer to page 9 to find out which for kingdoms belong to Domain Eukarya.
2. What is the key concept for section 6.5?
3. Find figure 13.16. What is gel electrophoresis used for?
4. What page does the glossary begin with?
5. Find figure 12-10. Which trait is dominant and is the dominant trait shown in white or purple on the pedigree?
6. Find page 230. What are the two DNA pyrimidines and two DNA purines?
7. Find section 16.5. What is the review topic for this section?
8. What page will you find the difference between thigmotropism, phototropism and gravitropism? Define each.
9. What does figure 7-20 illustrate?
10. What topic is covered in Unit 2?

Becoming Familiar with your State Standards

1. What does the acronym GPS represent?
2. The major content standards for this course are SB1-SB5. What do you think SB1 stands for?
3. Which sub-standard requires you to compare the quantity of energy in the steps of an energy pyramid?
4. Which standard deals with the theory of evolution?
5. Which sub-standard states “compare and contrast viruses with living organisms”?
6. Which sub-standard deals with “tropisms”?
7. How many ScSh standards are there?
8. What is the difference between the ScSh standards and the SB standards?
9. Why do you think it is important to have state standards? Justify your response.

Becoming Familiar with the Classroom Website (log-in to a computer and navigate to the classroom website)

1. What information is available on the homepage? Just list a few items.
2. Which links on the left side of the webpage are germane to this course?
3. Click on “Daily Agenda & Calendar”. What will be doing in class on January 9th? How can the information on this page help you throughout the semester?
4. Click on “Labs, Activities & Assignments. What standards are covered on the Double Diffusion Labs?
5. Click on the “Honors Biology” link. What information is available here? List at least five items.
6. How many pages is the long version of the EOCT Study Guide?
7. Do you have any Honors Biology Homework this week?
8. Where can you find the link to the online version of your textbook?
9. What are two of your teacher’s interests?

Becoming Familiar with Your Classroom

1. Find the following safety equipment in your classroom and describe the physical location of each:
 - Eyewash station and Safety shower
 - Fire extinguisher
 - Goggles & Goggle storage center
 - Possible exits
2. How many lab stations are in your classroom?
3. Our main door to the classroom is analogous which part of a cell?
4. What instructions/diagrams are laminated and hanging by the front/exiting door?
5. Where can you find the following classroom essentials:
 - State standards
 - Trash cans
 - Pencil sharpeners
 - Student work displayed (two locations)
 - Essential question, interactive word wall, warm-up, closing
 - Rulers, scissors, glue, etc.
 - Tape and stapler
6. Explain what is meant by our one classroom rule?
7. What resources are available in the backroom of your classroom?