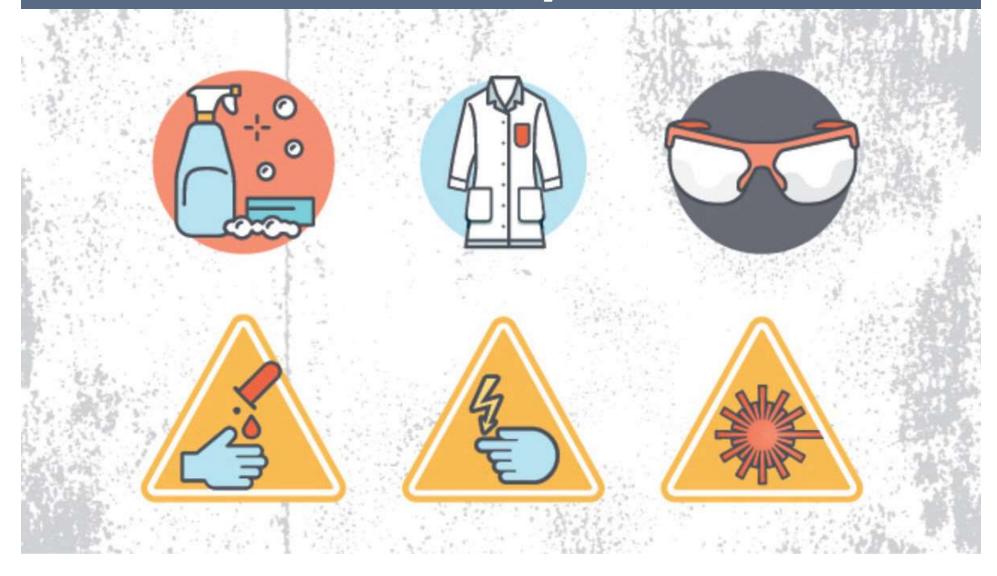
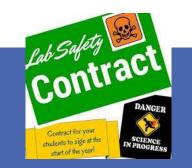
Physical Science Lab Safety Rules



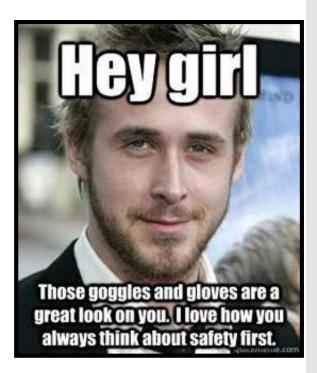


Lab Safety



Lab Safety Contract

- You cannot do any labs until you and your parent/guardian signs and returns contract.
- Zeros will go in the grade book



Due: As soon a possible.

 If you turn it in to me by Tuesday August 11st, you will receive a yummy piece of candy!!

Lab Safety Test Wednesday August 12th

Start Strong

- Study your notes
- Go to my website and download the PowerPoint to help you study.
- You must make an 80 to do lab.
- Will go in IC as a daily grade.

- 1. Listen to or read <u>instructions</u> carefully before attempting to do anything.
- 2. Wear safety goggles to protect your <u>eyes</u> from <u>chemicals</u>, <u>heated</u> materials, or things that might be able to <u>shatter</u>.
- 3. Notify your teacher if any spills or <u>accidents</u> occur.



- 4. After handling chemicals, always wash your <u>hands</u> with <u>soap</u> and water.
- 5. During lab work, keep your hands away from your <u>face</u>.
- 6. Tie back long <u>hair</u> and closed toe shoes.





7. Roll up loose <u>sleeves</u>.



- Know the <u>location</u> of the fire extinguisher, fire blanket, eyewash station, and first aid kit.
- Keep your work area <u>uncluttered</u>. Take to the lab station only what is <u>necessary</u>.
 Stay at your station unless you need materials.



- 10. It is suggested that you wear glasses rather than <u>contact lenses</u>. (Goggles need to be in non-vented position)
- 11. Never put anything into your <u>mouth</u> during a lab experiment.
- 12. Clean up your lab area at the <u>conclusion</u> of the laboratory period.
- 13. Never "horse around" or play practical jokes in the laboratory.



B. Glassware Safety

- 1. Chipped or cracked glassware should not be <u>used</u>. Show it to the <u>teacher</u>.
- Broken glassware <u>should not</u> be disposed of in a classroom trashcan. There is a <u>special</u> glass disposal container for it.
- 3. When pouring liquids into glassware, make sure the container you are pouring into is resting on a table at least a <u>handsbreadth</u> from the edge.

X.



B. Glassware Safety

4. Pour down a glass stirring rod to prevent liquids from <u>splattering</u>.

5. If a piece of glassware gets broken, do not try to clean it up by yourself. <u>Notify</u> the teacher.

6. It is hard to tell if <u>glass</u> is <u>hot</u> or <u>cold</u>. You should place your <u>hand</u> over the glass test it out

C. Chemical Safety



1. Wear protective goggles and a lab <u>apron</u> whenever heating or <u>pouring</u> hazardous chemicals.



- 2. Never mix chemicals <u>together</u> unless you are told to do so (and then only in the <u>manner</u> specified).
- 3. Never <u>taste</u> any chemicals (you should never taste <u>anything</u> in the lab).



C. Chemical Safety



- 4. If you need to smell the <u>odor</u> of a chemical, <u>waft</u> the fumes toward your nose with one hand. Do not put your nose over the container and <u>inhale</u> the fumes.
- 5. Never pour water into a concentrated <u>acid</u>. Acid should be poured <u>slowly</u> into water.





C. Chemical Safety

- If you spill an acid, you pour a base to cancel it out. If you spill a base, you pour an acid to cancel it out.
- 7. Follow the instructions of your teacher when disposing of all <u>chemicals</u>.
- 8. Wash your hands after handling hazardous chemicals.





D. Electrical Safety

1. Lay electrical cords where no one can trip on them or get <u>caught</u> in them.



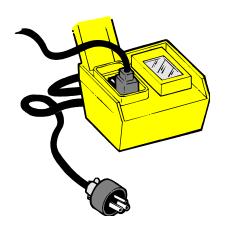
- 2. Be sure your hands and your lab area are <u>dry</u> before using electrical equipment.
- 3. Never poke anything into electrical <u>outlets</u>.

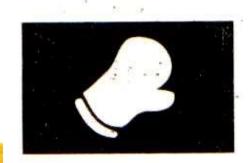




D. Electrical Safety

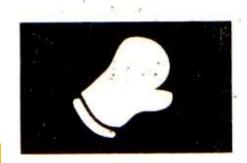
- 4. Unplug cords by pulling the <u>plug</u> and not the cord.
- 5. Unplug all electrical equipment at the end of the lab period.





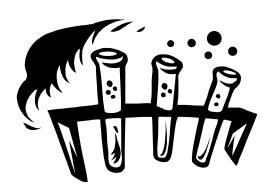
E. Heating Safety

- 1. Let burners and hotplates cool down before <u>touching</u> them. Test to see if they are cool enough by bringing the <u>back</u> of your hand close to them.
- 2. Use tongs and/or protective gloves to handle <u>hot</u> objects.
- 3. Never reach across an open <u>flame</u> or <u>burner</u>.



E. Heating Safety

- 4. Always point the top ends of test tubes that are being heated <u>away</u> from people.
- 5. When heating a test tube, move it around slowly over the flame to distribute the <u>heat</u> evenly.





Injury: Burns

To do: Immediately flush with <u>cold</u> water until burning sensation is lessened.



First Aid



Injury: Cuts, bruises

To do: Do not <u>touch</u> an open wound without safety gloves. Pressing directly on minor cuts will stop bleeding in a few minutes. Apply cold compress to bruises to reduce

<u>swelling</u>.

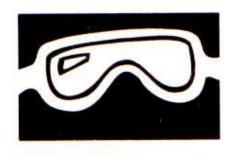




Injury: Fainting

To do: Provide <u>fresh</u> air and have the person recline so that their head is <u>lower</u> than the rest of their body.





Injury: The eyes

To do: Flush eyes immediately with plenty of <u>water</u> for several minutes. If a foreign object is lodged in the eye, do not allow the eye to be <u>rubbed</u>.







Injury: Poisoning

To do: Find out what substance was responsible for the poisoning and alert the <u>teacher</u> immediately.

First Aid



Injury: Spills on the skin

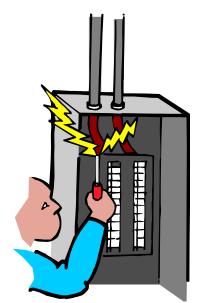
To do: Flush with large quantities of water. For acid spills apply <u>baking</u> <u>soda</u> solution. For base spills apply <u>vinegar</u> or boric acid.





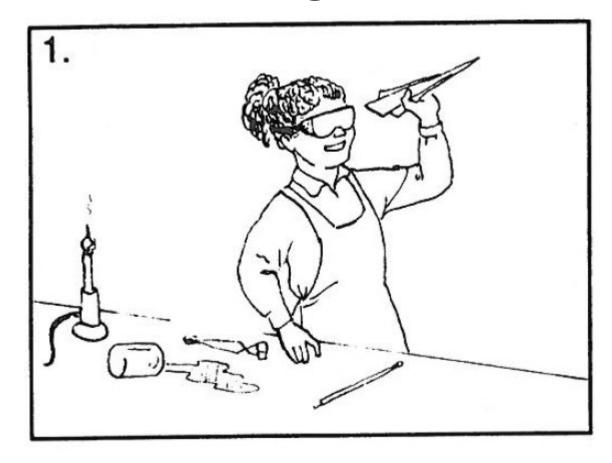
Injury: Electrical shock

To do: Shut off the current at the <u>source</u>. Remove wire with rubber gloves. Alert the <u>teacher</u> immediately.



Using a white board

Identify one safe behavior and one unsafe behavior in the image below.



Identify one safe behavior and one unsafe behavior in the image below.



Identify one safe behavior and one unsafe behavior in the image below.



Identify one safe behavior and one unsafe behavior in the image below.



Use the image below to identify all things that would be considered a lab safety issue.

