

[Risk Assessment Form #3](http://www.societyforscience.org/document.doc?id=18)

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ALL students are required to fill out the risk assessment form. This risk assessment form is meant to evaluate the safety concerns related to the experiment in detail. **Whoever is supervising the student during the actual experiment needs to have a discussion about this form with the student and to make sure that all concerns have been noted.** The adult that is supervising the student or providing guidance will need to sign this form.

Below are suggestions of what each area could contain. This is by no means inclusive!

NOTE: If NO concerns are associated with the experiment, please write “NONE” or “n/a” in each of the blanks. Please sign and date the form.

1. List/Identify the hazardous chemicals, activities, or devices that will be used.

- Chemicals: excluding water - detergents, cleaners, glue, paint, dry ice, fertilizer, eggs, WD-40, oil, gas, raw meat, batteries, fuel, potting soil, DEA-controlled substances; prescription drugs, non-prescription drugs, etc.
- Activities: Launching/firing projectile, building/starting a fire, using sharp knives/equipment, climbing ladder, explosives, firing a firearm, cooking, building equipment, welding, radiation, etc.
- Devices: ANY electrical equipment, power tools (drills, saws, sanders, nail gun), knives, launching mechanism, lighter, etc.

2. Identify and assess the risks involved.

- Write the items from above BUT now include the risk involved. What are the safety concerns for each?
 - Eye/skin/nose irritation or damage
 - Electrocution
 - Burns
 - Poisonous
 - Cutting off fingers
 - Inhalation of fumes
 - Allergic reaction
 - Death
 - Flammable

3. DESCRIBE the safety precautions and procedures that will be used to reduce the risks.

- NOW that you know what the risks are and why it is a risk – explain how you will keep safe! The actual labels and manuals are GREAT sources of information. Some examples are below:
 - Adult supervision at all times; Adult supervision as needed
 - Will not ingest
 - Hands washed prior to and after completion of experiment
 - Countertops sanitized with...
 - Fire extinguisher on hand
 - Gloves worn throughout the duration of the experiment
 - Goggles worn throughout the duration of the experiment
 - Apron worn throughout the duration of the experiment
 - Chemicals will be handled by an adult
 - Guards used on equipment when in operation.
 - Exhaust vent used during experiment; Experiment performed in well-ventilated area; Experiment performed outside
 - Student trained in standard microbiological practices
 - Proper lab protocol followed

4. Describe the disposal procedures that will be used (when applicable).

- Discuss with your designated supervisor the proper disposal of all substances.
- Use websites as needed.
- If no disposal procedures are needed, write not applicable (n/a)
 - Chemicals flushed down sink with large quantities of water
 - Thrown in outdoor trashcan

5. List the sources of safety information.

- MSDS (chemicals) – PRINT off MSDS <http://www.flinnsci.com/msds-search.aspx>
- Product package
- Safety label information
- Designated Supervisor – (NAME)
- Teacher – (NAME)
- Website link _____
- Other _____
- Fire Safety: <http://www.nfpa.org/categoryList.asp?categoryID=244&URL=Safety%20Information/Safety%20tips%20&%20fact%20sheets>
- Electrical Safety: http://kidshealth.org/parent/firstaid_safe/home/fire.html and or http://www.nstar.com/residential/customer_information/safety/kids.asp
- Gun Safety: <http://www.nrahq.org/education/guide.asp>
- Not applicable (n/a)

Designated Supervisor – Bottom of form

- **LAST STEP is for the designated supervisor to sign and date the document. The DATE of review must be PRIOR to actual experimentation.**
- Unless the designated supervisor's job position relates to the actual experiment, put n/a.
- Experience or training as it relates to the student's area of research must be included if you are supervising the experiment and safety concerns are noted.
 - Training – Read manual on electrical safety
 - Reviewed safety manual of cordless drill
 - Reviewed MSDS sheets for all chemicals used in this experiment
 - Cooking – 20 years
 - Gardening – 10 years
 - Woodworking – 10 years
 - Gun Safety Course – 2008; Avid hunter 20 years Reviewed MSDS sheets for all chemicals used in this experiment
- Include phone number with area code or an email address.