

## **Laboratory Safety Practice Drills for K-5**

1. Students learn the vocabulary and develop their own set of safety icons. These symbols can be especially helpful for students with language barriers.
  - a. Poison
  - b. Explosive
  - c. Flammable
  - d. Toxic
  - e. Harmful
  - f. Irritant
  - g. Allergen
  - h. Sensitizer
  - i. Dangerous or harmful for the environment
2. Students develop their own safety rules for the Student Safety Acknowledgement.
3. Students make pictorial safety signs for laboratory / classroom.  
Examples:
  - a. Chemical splash goggles
  - b. Shower
  - c. Eyewash
  - d. Drench hose
  - e. Fire extinguisher
  - f. Exit
  - g. Non-exit
4. Students should learn to read a chemical label. Use a household product that you use in your science activities: sugar, salt, vinegar, glue or crayons.
5. Download SDSs from Flinn Scientific: **www.flinnsci.com** for the household products. Go over information such as hazards, NFPA ratings, personal protective equipment that is needed. Talk about importance of never tasting any chemical even if it is sugar in a science laboratory setting.
6. Practice emergency procedures in the event of an accident occurring in the lab. Depending on the grade level of your students, cut the following Problem-Solving Scenarios for Laboratory / Classroom Safety and place them on a 4 x 6 index card. Laminate them. Talk about “practice” with the students to avoid mass hysteria from erupting when you read one of the “accidents” to the students. Walk around the laboratory / classroom when students are working, have one of them draw a card, read it (or you may need to) to the class. Have them decide / practice what should be done if the “accident” were to really occur.



### Problem-Solving Scenarios for Laboratory Safety

a. An electric cord falls into some water. Sparks are flying everywhere.

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### Problem-Solving Scenarios for Laboratory Safety

b. A student drops a beaker containing vinegar that breaks and splashes on a student's legs and feet.

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### **Problem-Solving Scenarios for Laboratory Safety**

c. A student splashes rubbing alcohol on her hands as she is pouring it down the sink drain.

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### **Problem-Solving Scenarios for Laboratory Safety**

d. Two boys are pushing and shoving each other during science investigation activities.

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### Problem-Solving Scenarios for Laboratory Safety

e. Alcohol splashes into a student's face. She is wearing chemical splash goggles.

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### Problem-Solving Scenarios for Laboratory Safety

f. A student who has diabetes starts to shake, feel faint and her vision is blurring.

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### Problem-Solving Scenarios for Laboratory Safety

g. When a student reaches in the gerbil cage to pick it up, the gerbil bites the student.

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### Problem-Solving Scenarios for Laboratory Safety

h. A student picks the pretty red peppers off a classroom plant, eats 5 of the peppers and becomes nauseous.

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**Problem-Solving Scenarios for Laboratory Safety**

- i. When a teacher puts the remains of a candle used for a source of heat in the trash can, the paper in the can catches on fire.

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**Problem-Solving Scenarios for Laboratory Safety**

- j. On a field trip, a reddish brown snake with a pattern on its back bites a student.

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### **Problem-Solving Scenarios for Laboratory Safety**

- k. An outbreak of lice occurs after students conduct a science activity that required chemical splash goggles. More than 1 student had worn the goggles without sterilizing them.

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### **Problem-Solving Scenarios for Laboratory Safety**

- l. A student's arm begins swelling after being stung by a sweat bee on a field trip.

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### Problem-Solving Scenarios for Laboratory Safety

m. Most of the students develop conjunctivitis after using hand lenses to observe the surface of rocks and crystals.

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### Problem-Solving Scenarios for Laboratory Safety

n. A student bumps the teacher's candle in a pie pan filled with wet sand and his sleeve catches on fire.

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### Problem-Solving Scenarios for Laboratory Safety

- o. Stitches are needed when a student cuts his hand on a broken beaker.

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### Problem-Solving Scenarios for Laboratory Safety

- p. A student vomits. The vomit is scattered on a worktable, the floor, the student and two other students.

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