Safety Test

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The Safety Challenge!

Take The Safety Challenge! by answering the following questions. Your safety is worth a perfect score—don’t accept less than 100 percent! (The answers are provided on page 11, but don’t look at them until you’re finished!)

OK With You?
1. In the following paragraph, underline six examples that show why Nagar and Nat are not ready for lab.

   Right before class Nagar touched up her hair with an extra application of hair spray. Then she rushed to class without stopping to drop off her extra supplies at her locker—she didn’t want to be late for today’s exciting lab. Nagar showed her friends her new long earrings and sandals. Then she noticed Nat’s new slicked-down hairstyle and commented on how much she liked it. Nat thanked her as he munched on an apple.

2. Is the following sentence correct? If not, correct it.
   If my clothes catch on fire, I should run for the nearest fire extinguisher to put out the flames.

   _______________________________________________________________
   _______________________________________________________________

What Do You Do?
3. Which of the following is NOT something you would want to do after completing an experiment? (Circle one.)
   a. Clean up the lab area and return all equipment to its proper place.
   b. Make sure all water faucets and appliances are turned off.
   c. Dispose of trash, chemicals, and broken glassware in the appropriate containers.
   d. Wash your hands with soap.
   e. Review the experiment to find safety concerns you should know about.
4. If you have the option of working with an open flame or a hot plate, which should you choose? Why?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

5. When do you need to wear safety goggles? (Circle all that apply.)
   a. When the teacher instructs me to do so
   b. Every class period
   c. When heat or chemicals are used
   d. When handling objects that may break, expand, or endanger my eyes in some way

6. You have accidentally broken a test tube and spilled a chemical on the table. Which of the following best explains what you should do? (Circle one.)
   a. Use water and paper towels to clean up the spill; place the broken test tube in the disposal container specified for sharp objects.
   b. Throw the glass into the nearest trash bin and let the spill air-dry.
   c. Quickly dispose of the glass, wipe up the spill with the nearest cloth, and hope nobody notices.
   d. Caution your lab partners to avoid the area while you inform the teacher of the small accident.

7. You accidentally get a corrosive chemical in your eyes. What should you do?

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
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___________________________________________________________________
Is It True?
Answer true or false to each statement. If the answer is false, correct the statement.

8. Living plants and animals in the wild and in the laboratory should always be treated with respect. True / False

____________________________________________________________________
____________________________________________________________________

9. The best way to cut a soft object is to hold it in the palm of your hand and then carefully cut it. True / False

____________________________________________________________________
____________________________________________________________________

10. If your lab partner’s hair caught on fire, you should quickly throw water on the burning hair. True / False

____________________________________________________________________
____________________________________________________________________

11. You should pour an acid or base into water to keep the acid from producing heat and splattering. True / False

____________________________________________________________________
____________________________________________________________________

12. It is important to taste a chemical to find out exactly what you are working with. True / False

____________________________________________________________________
____________________________________________________________________

13. It’s OK to take something from the lab as long as you return it. True / False

____________________________________________________________________
____________________________________________________________________

14. It is OK to illuminate a microscope with direct sunlight. True / False

____________________________________________________________________
____________________________________________________________________
Where Is It?

15. Where are the lab’s fire extinguishers? Describe how to operate them.

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

16. If a fire suddenly starts in the laboratory, you should inform the teacher and leave the room immediately. Draw a diagram of the fire-evacuation route you would then follow.

17. Where should you dispose of broken glassware in your laboratory?

____________________________________________________________________
____________________________________________________________________

18. Where is the nearest telephone? Are the phone numbers posted for the fire and police departments, as well as for the ambulance and poison control center?

____________________________________________________________________
____________________________________________________________________

19. Where is the first-aid kit?

____________________________________________________________________
____________________________________________________________________

20. List the location(s) of the laboratory fire blanket(s).

____________________________________________________________________
____________________________________________________________________
The Safety Connection
Use the clues below to complete the crossword puzzle on the next page.

Clues

Down
1. Know the location of this important piece of equipment.
3. ______ the day’s experiment before you begin, paying particular attention to safety issues.
6. Secure loose ______ before beginning a lab.
7. Wearing this will protect your clothes.
8. What you should do in the event of a fire in the lab
9. What you need before you can bring an animal to the lab or classroom
11. ______ one chemical with another could be dangerous. Never do so unless the textbook or your teacher has specifically asked you to do so.
13. Never work ______ in the laboratory.
16. Never pour water into this; instead, slowly pour this into water.

Across
1. If a chemical comes into contact with your eyes, wash them with water for at least ______ minutes.
2. Handle scissors, scalpels, knives, and other ______ objects with extreme caution.
4. When heating something in this, never point it at yourself or anyone else.
5. Never ______ any liquid while in the lab, unless specifically instructed to do so by your teacher.
10. Know where this is before you begin any lab; you may need to find it in case of emergency.
11. Report accidents to your teacher, no matter how ______ they may seem.
12. Some of these are corrosive.
14. ______ lab equipment only as your teacher instructs.
15. Don’t wear ______ in the lab.
17. This kind of glassware is dangerous to use because it has stress points where the glass may break.
18. Never place this where someone may trip over it.
The Safety Connection

Use the clues on the previous page to complete the crossword puzzle below.
Answer Key to The Safety Challenge!

Look at these answers only after you’ve taken The Safety Challenge! If you find that you’ve answered any of the questions incorrectly, go back and take the challenge again!

1. Right before class Nagar touched up her hair with an extra application of hair spray. Then she rushed to class without stopping to drop off her extra supplies at her locker—she didn’t want to be late for today’s exciting lab. Nagar showed her friends her new long earrings and sandals. Then she noticed Nat’s new slicked-down hairstyle and commented on how much she liked it. Nat thanked her as he munched on an apple.

2. If my clothes were to catch on fire, I should stop immediately, drop to the floor, and roll.

3. e

4. Always use the hot plate, because it provides a safer means of heating an object.

5. a, c, d

6. d

7. Wash my eyes with water for 15 minutes.

8. True

9. False. The best way to cut an object is to use an appropriate work surface, never your hand.

10. False. You should obtain the nearest safety blanket and use it to extinguish the flame.

11. True

12. False. Never touch, taste, or smell a chemical unless specifically instructed to do so by your teacher.

13. False. Never take anything from the laboratory without permission from your teacher.

14. False. It’s not OK to use direct sunlight to illuminate a microscope; doing so could seriously damage your eyes.

15–20. Answers will depend on your specific circumstances.
Answers to The Safety Connection

- SHARP
- FIFTEEN
- FIRE
- TEST TUBE
- DRINK
- PHONE
- chemical
- minor
- use
- sandals
- chip
- cord
- safe