

TEXAS GRADE 3 SCIENCE

Developmental Series Sample

Knowledge and Skills Statement

(3.1) Scientific processes: The student conducts field and laboratory investigations following home and school safety procedures and environmentally appropriate and ethical practices.

Student Expectation

(A) The student is expected to demonstrate safe practices during field and laboratory investigations.

ACTIVITY

Safe Science Scramble

Materials

For each student:

Safe Science Scramble activity sheets

Background

Most students enjoy the sense of discovery that comes with completing hands-on science activities in the classroom and in the field. The vast majority of textbook and activity book activities go to great lengths to alert teachers and students to specific safety precautions related to the exercise. All students should have a working awareness of appropriate general science safety rules.

Procedure

Lead a discussion emphasizing the importance of safe practices during field and laboratory investigations. Use the examples below when explaining some of the basic rules of safe practices.

1. Understand the teacher's instructions before starting an investigation, and follow the instructions carefully.
2. Wear proper clothing and protective gear for the investigation.
3. Understand and follow the proper procedures for avoiding accidents during the investigation.
4. Understand and follow the proper procedures for responding to an accident.

Distribute the *Safe Science Scramble* activity sheet. Review the directions, and allow students to work independently or in pairs.



Safe Science Scramble Activity Sheet

Background

Laboratory and field investigations are fun ways to learn science. Following safe science investigation practices can help you keep from getting hurt.

Procedure

Each pair of sentences in the clue table describes one correct investigation practice and one incorrect investigation practice. Following each sentence is a letter clue. Use the letter clues to complete two word scrambles.

1. For each sentence pair, decide which sentence describes a correct investigation practice and which sentence describes an incorrect investigation practice. Then place a check in the column marked "Check (✓) if Correct" or "Check (✓) if Incorrect."
2. If the sentence describes a correct investigation practice, go to the correct investigation practice scramble.
3. Use the letter clue for that sentence to fill in all of the blanks that have the same number as the sentence pair number in the correct investigation practice scramble.
4. If the sentence describes an incorrect investigation practice, go to the incorrect investigation practice scramble.
5. Use the letter clue for that sentence to fill in all of the blanks that have the same number as the sentence pair number in the incorrect investigation practice scramble.

When you have filled in all of the blanks, the scrambles will reveal another correct investigation practice and another incorrect investigation practice.



Clue Table

Sentence Pair Number	Description of Investigation Practice	Check (✓) if Correct	Check (✓) if Incorrect	Letter Clue
1	Horseplay can be dangerous during a science lab.			F
	You may begin an experiment that you understand when your teacher is not in the classroom.			A
2	It is safe to use chipped and cracked glassware if you put tape over the chip or crack before the glassware is used.			I
	It is best to keep all lab equipment away from the edge of the table.			W
3	Unplug a hot plate or microscope light by pulling on the cord.			Y
	Unplug a hot plate when it is not being used.			L
4	Tape worn or cracked electrical cords before you use them.			E
	Ask your teacher for help if you are confused about a lab procedure.			R
5	You may eat a snack while working with chemicals in the lab.			W
	Wash your hands with soap and water after working with animals or chemicals in the science lab.			N
6	Listen carefully to all directions before beginning a science activity.			S
	Wipe up any spilled chemicals with a sponge.			L
7	Wear protective gloves or use tongs to handle hot glassware.			O
	Wear safety goggles only when working with chemicals.			T

Clue Table (continued)



Sentence Pair Number	Description of Investigation Practice	Check (✓) if Correct	Check (✓) if Incorrect	Letter Clue
8	Chemicals and other materials should be mixed only according to lab procedure or teacher directions.			T
	Wear sandals and shorts to be comfortable while conducting a field investigation.			P
9	Wear a protective apron when working with chemicals or liquids.			U
	Skip steps in the lab procedure that you do not understand.			H
10	Stay with your group when on a science field trip.			C
	Wash lab glassware completely before using it as a drinking glass.			S
11	Dry your hands before touching an electrical plug, switch, or device.			I
	Run to your teacher for help if your clothes catch on fire.			M
12	Smell or taste chemicals or other materials during a science lab only when directed by your teacher or the lab procedure.			A
	Pick wild berries off of bushes and eat them if you get hungry while on a field investigation.			C



Correct Investigation Practice Scramble

Use the letters from sentences that describe a correct investigation practice.

1 7 3 3 7 2

12 3 3

11 5 6 8 4 9 10 8 11 7 5 6

Incorrect Investigation Practice Scramble

Use the letters from sentences that describe an incorrect investigation practice.

8 6 1 3

5 2 7 9

12 9 4 11 2 12 1 6 10



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(Questions 1-2 of 4)

1 A student accidentally spills a chemical at a lab station when the chemical is poured from a bottle. What is the first thing the student should do to take care of the spill?

- (A) sound the fire alarm
- (B) wipe up the spill with a paper towel
- (C) tell the teacher and ask for directions
- (D) tell another student about the spill

2 A hot plate is a piece of laboratory equipment. It has an electrical cord. When turned on, it becomes hot. It is used to heat things. What should a lab group do with a hot plate at the end of a lab?

- (A) cool the hot plate by splashing water on it
- (B) unplug the hot plate by pulling on the plug with dry hands
- (C) leave the hot plate on for the next lab group
- (D) take the cord out of the hot plate by pulling on the cord

