

Safety Detectives

Read closely to identify safe investigation choices.

4.1.C “demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each action that keeps an investigator safe. Circle each piece of safety equipment to show how it helps during an investigation.

Two Safe Investigations

- ① Ms. Ortiz’s class plans two investigations: testing how quickly different soils absorb water in the classroom and counting insects along a schoolyard path. Before starting, the class reads the procedure, finds the safety equipment, and talks about possible hazards. A safe investigator notices risks early, follows directions, and tells the teacher about any unsafe condition.
- ② For the soil test, students wear splash goggles before pouring water into cups. They keep cup openings pointed away from faces, walk instead of carrying water quickly, and wipe up a spill only after telling Ms. Ortiz. They do not taste soil or water. At the end, they pour materials where the teacher directs, clean the table, and wash their hands.
- ③ Outside, students stay with their assigned partner and remain inside the marked study area. They wear closed-toe shoes to protect their feet and use a clipboard so they can record observations without kneeling near insects. They watch organisms without touching them, avoid unknown plants, and never collect an animal. If they find broken glass, a sting, or another danger, they move away and report it immediately.

2 ANSWER WITH EVIDENCE Use the passage

1 What safety equipment do students wear before pouring water into cups?

2 What should students do before wiping up a spill?

3 Name two safe actions students use during the schoolyard insect count.

4 What should a student do after finding broken glass in the study area?

3 YOUR TURN Your own words

Plan a safe investigation to compare the kinds of leaves in two schoolyard areas. Write three safety actions you will take, including one piece of safety equipment and when you will use it. Then actually demonstrate safety during a short classroom soil-water observation. Teacher: screen damp soil for hazards and provide each child fitted splash goggles, a cup of damp soil, a small cup of clean water and a tray. Model safe pouring and arrange handwashing. Put on goggles before handling water. With both cups inside the tray and openings away from faces, slowly pour a little water onto the soil. Record one actual change you see on extra paper. Do not taste soil/water or touch your face. Walk carefully; stop and report any concern/spill before teacher-directed cleanup. Return materials, remove goggles as directed, clean your work area and wash hands. Teacher observes each child's equipment use, controlled pouring, reporting readiness and cleanup, supporting and repeating missed steps. The outdoor plan stays preparation, not a performed field investigation.

PART 1 • READ AND MARK

Underline each action that keeps an investigator safe. Circle each piece of safety equipment to show how it helps during an investigation. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What safety equipment do students wear before pouring water into cups?	Students wear splash goggles.
2	What should students do before wiping up a spill?	They should tell Ms. Ortiz, or the teacher, before wiping up the spill.
3	Name two safe actions students use during the schoolyard insect count.	Answers include staying with an assigned partner, remaining inside the marked area, wearing closed-toe shoes, using a clipboard, watching insects without touching them, avoiding unknown plants, and not collecting animals.
4	What should a student do after finding broken glass in the study area?	The student should move away and report it immediately.

PART 3 • YOUR TURN (SAMPLE ANSWER)

I will wear closed-toe shoes before walking in the schoolyard. My partner and I will stay in the marked areas and use a clipboard to record leaf types. We will not touch unknown plants, and we will move away and tell the teacher if we see broken glass. Actual classroom record example only if observed: the soil darkened and water pooled briefly. Teacher checklist: goggles on before pour, cups over tray/openings away, controlled handling, knows to stop/report, teacher-directed cleanup and handwashing. Accept the actual observation and assess observed actions, not future promises alone.

Accept safety plans that include three appropriate actions for a schoolyard investigation. The response must name safety equipment and explain when it will be used. Require the actual teacher-supervised demonstration/equipment use; no spill or hazard must be manufactured. Guidance checked against TEA Texas Science Safety Standards, student/teacher responsibilities and eye protection:

<https://tea.texas.gov/educators/subject-areas/texas-science-safety-standards-2nd-edition.pdf> . One safe supported investigation addresses the gap without every listed classroom/field setting.