

Storm Safety Claim

Read evidence, then judge a flood-safety design.

3-ESS3-1 "Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. Clarification Statement: Examples of design solutions to weather-related hazards could include barriers to prevent flooding..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline one claim about the design. Circle two details that show why the claim may be true.

A Wall for Pine Creek School

- ① After three days of hard rain, Pine Creek rose over its banks. Water crossed the playground and reached the school garden. The principal asked an engineering team to study ways to protect the school. The team chose a low flood wall beside the creek. They also planned a gate that workers could close before a storm. The wall would guide high water away from the playground.
- ② To test the idea, the team built a small model. They poured water into a tray that represented the creek. With no wall, water spread across the model playground. With the wall and closed gate, most water stayed on the creek side. The team also planned drains behind the wall. Drains would carry rainwater from the school yard into the creek after the water level dropped.
- ③ The team claimed that the flood wall was a useful design for Pine Creek School. Their claim was supported by the model test, which showed less water on the playground. The wall could reduce damage to the garden and give people a safer place to walk. Still, the wall would not stop every flood. Workers would need to close the gate, clear the drains, and leave room for very high water.

2 ANSWER WITH EVIDENCE Use the passage

1 What claim did the team make about the flood wall?

2 What result from the model test is evidence that the wall could help?

3 Name two impacts the flood wall could reduce or prevent.

4 Is the flood wall a worthwhile design based on the passage? State a claim and give one piece of evidence.

3 YOUR TURN Your own words

Choose a weather hazard and a design that could reduce its impact. Write exactly 3 sentences that name the hazard and design, make a claim about whether the design is worthwhile, and explain two ways it could reduce harm.

PART 1 • READ AND MARK

Underline one claim about the design. Circle two details that show why the claim may be true. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What claim did the team make about the flood wall?	The team claimed that the flood wall was a useful design for Pine Creek School.
2	What result from the model test is evidence that the wall could help?	With the wall and closed gate, most water stayed on the creek side instead of spreading across the model playground.
3	Name two impacts the flood wall could reduce or prevent.	It could reduce damage to the garden and keep high water away from the playground, giving people a safer place to walk.
4	Is the flood wall a worthwhile design based on the passage? State a claim and give one piece of evidence.	Yes. The model test showed that the wall and closed gate kept most water on the creek side, so less water reached the playground.

PART 3 • YOUR TURN (SAMPLE ANSWER)

A wind-resistant roof is a worthwhile design for a house in a place with strong storms. Metal straps can connect the roof to the walls, so strong winds are less likely to lift it off. This can keep rain out and help protect people and their belongings.

Accept claims that clearly judge whether a design is worthwhile and support the judgment with passage evidence. For Part 3, accept different weather hazards and designs if the student explains two accurate ways the design reduces harm.