

Sprout Evidence Talk

Use data, a model, and respectful discussion to support a solution.

3.3 “Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions...”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the sentence that gives an explanation and the sentence that gives a proposed solution. Circle the evidence each speaker uses to support an idea.

How Much Water?

- ① Our class investigated how much water helps bean seeds sprout. We put five seeds in each of four cups. Each cup got a different amount of water each day. We kept seed type, light, soil, and room the same, so water was the only change. After seven days, we counted the seeds that sprouted. Results are in the table.

BEAN SEED RESULTS AFTER SEVEN DAYS

Water Each Day	Seeds That Sprouted, Out of 5
0 mL	0
5 mL	3
10 mL	5
20 mL	2

- ② To explain the results, Mia used the table as evidence. She said, “The cup with 10 milliliters of water had five sprouts. The other cups had fewer, so 10 milliliters helped most in this test.” Her group built a model with cups, paper seeds, and blue yarn. It showed seeds need water, but too much may leave less air in soil.
- ③ The group proposed giving new bean seeds 10 milliliters of water each day. They shared their explanation with another group. Jordan listened and said, “Our evidence also shows fewer sprouts with 20 milliliters.” Ava added, “We should repeat the test with more seeds before making a class rule.” The students thanked Ava and planned a second test.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Name two conditions the class kept the same. How did this make water the only change?

2 Which table data supports Mia's claim that 10 mL helped the most?

3 What explanation did Mia give? Include one fact from the table as evidence.

4 How did Jordan show active listening, and what did Ava suggest before making a class rule?

3 YOUR TURN _____ Your own words

Imagine a fair test to find which ramp surface lets a toy car roll farthest. Write exactly four sentences: name the test and a model you would use, give results for two surfaces, explain what the data shows, and propose a next step or solution while inviting a classmate's evidence.

PART 1 • READ AND MARK

Underline the sentence that gives an explanation and the sentence that gives a proposed solution. Circle the evidence each speaker uses to support an idea. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Name two conditions the class kept the same. How did this make water the only change?	They kept the seed type, light, soil, and room the same. This meant the amount of water was the only change.
2	Which table data supports Mia's claim that 10 mL helped the most?	The 10 mL cup had 5 sprouts. The other amounts had 0, 3, and 2 sprouts, which were fewer.
3	What explanation did Mia give? Include one fact from the table as evidence.	Mia explained that 10 mL of water helped the most in this test. She used the fact that the 10 mL cup had 5 sprouts.
4	How did Jordan show active listening, and what did Ava suggest before making a class rule?	Jordan added related evidence that 20 mL had fewer sprouts. Ava suggested repeating the test with more seeds.

PART 3 • YOUR TURN (SAMPLE ANSWER)

I would test cardboard and felt ramps with the same ramp height, using a drawing with arrows as my model. The car rolled 80 centimeters on cardboard and 35 centimeters on felt. The data shows that cardboard let the car roll farther in this test. I would use cardboard for a long roll and ask a classmate to share evidence about whether we should repeat the test.

Accept equivalent evidence-based explanations that accurately use the table values. For the open response, accept reasonable invented data when the explanation matches the data and the student includes a model and respectful invitation for another person's evidence.