

Science Messages Matter

Match your explanation to the audience, purpose, and format.

7.3.B “communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Circle the audience or format named in each paragraph, then number the first sentence of paragraphs 1, 2, and 3 as 1, 2, and 3 to mark each communication setting.

Sharing a Garden Investigation

- ① During a school garden investigation, Maya and Luis noticed that basil plants beside a wall were shorter than basil plants in an open bed. They measured plant height twice a week and recorded hours of direct sunlight. When speaking with their lab partners, they explained their evidence in plain language: the wall shaded the plants for part of the day. Together, they proposed moving several pots to a sunnier place while leaving other pots where they were. Keeping both groups would help them compare results fairly.
- ② For visitors at the science fair, the team made a poster instead of repeating the full conversation. Its title stated the question, and a small graph showed average height for the two locations. A caption explained that less direct sunlight was a possible reason for the shorter plants, not proof by itself. The poster listed the comparison plan and invited visitors to predict what later measurements might show. Luis pointed to the graph and answered questions, while Maya recorded suggestions from visitors.
- ③ After the fair, Maya wrote an email to the garden coordinator. She used a respectful greeting and a short summary because the coordinator needed a decision, not every measurement. Maya reported the pattern, named the proposed pot move, and asked permission to continue the comparison for four more weeks. She attached the team's data sheet so the coordinator could check the evidence. The group later met to decide how to revise the plan if the moved plants did not grow taller. Their communication changed with the purpose, audience, and format.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 How did Maya and Luis explain their evidence to their lab partners, and what solution did they propose?

2 What is one feature of the science fair poster that helped visitors understand the investigation?

3 Why did Maya use a respectful greeting and a short summary in her email?

4 What did the group plan to do if the moved plants did not grow taller?

3 YOUR TURN _____ Your own words

Choose a school science investigation with an observation and a possible solution. Write six sentences: one sentence you would say to a lab partner, then a five-sentence message to a school decision maker that gives evidence, proposes an action, asks for a decision, and tells how your team will test the action.

PART 1 • READ AND MARK

Circle the audience or format named in each paragraph, then number the first sentence of paragraphs 1, 2, and 3 as 1, 2, and 3 to mark each communication setting. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did Maya and Luis explain their evidence to their lab partners, and what solution did they propose?	They used plain language to explain that the wall shaded the plants. They proposed moving some pots to a sunnier place while leaving others where they were.
2	What is one feature of the science fair poster that helped visitors understand the investigation?	A small graph showed the average plant height for the two locations. A caption also explained that less sunlight was a possible reason, not proof by itself.
3	Why did Maya use a respectful greeting and a short summary in her email?	The garden coordinator needed a decision, not every measurement. A respectful greeting and short summary fit that audience and purpose.
4	What did the group plan to do if the moved plants did not grow taller?	They planned to meet and decide how to revise the plan.

PART 3 • YOUR TURN (SAMPLE ANSWER)

To my lab partner: Our thermometer readings show that the shaded water fountain stayed cooler than the fountain in direct sun. Dear Principal Lee, our team measured the water temperature at two fountains at lunch for five days. On every day, the fountain in direct sun was warmer than the shaded fountain. We propose adding a shade cover above the sunny fountain. May we test a temporary cover for two weeks? We will measure both fountains at the same time each day and compare the results.

Accept equivalent descriptions of the passage's communication choices when students connect a format to its audience or purpose. For the open response, accept a different investigation if it has six sentences, includes evidence and an action, requests a decision, and gives a reasonable test plan.