

Light Clues

Use observations to ask testable science questions.

2.1.A “ask questions and define problems based on observations or information from text, phenomena, models, or investigations;”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the observations the class made. Circle the question and the problem the students could investigate.

Bean Seeds and Light

- ① Ms. Lee’s class put one bean seed in each of two cups of soil. They gave both seeds the same amount of water. One cup sat by a sunny window. The other cup sat in a dark cabinet for five days.
- ② On the sixth day, the window plant had a green stem and two small leaves. The cabinet seed had no stem above the soil. The class noticed that the cups had different amounts of light.
- ③ The students wrote, “Does a bean seed need light to grow leaves?” They also named a problem to investigate: How can we test light without changing water, soil, or seed type? Next, they planned to keep those parts the same.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What observation from day six supports asking about light and leaves?

2 What question did the students ask about the bean seed?

3 What problem did the students want to investigate?

3 YOUR TURN _____ Your own words

Look at something you can see in your classroom or outdoors. Write one observation, one question you could ask, and one problem you could investigate.

PART 1 • READ AND MARK

Underline the observations the class made. Circle the question and the problem the students could investigate. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What observation from day six supports asking about light and leaves?	The plant by the window had a green stem and two small leaves, but the seed in the cabinet had no stem above the soil.
2	What question did the students ask about the bean seed?	Does a bean seed need light to grow leaves?
3	What problem did the students want to investigate?	They wanted to test light without changing the water, soil, or seed type.

PART 3 • YOUR TURN (SAMPLE ANSWER)

I see that a puddle in the sun is smaller than a puddle in the shade. Why does the sunny puddle get smaller faster? How can we test whether sunlight changes how fast water dries?

Accept observations that state what the student notices, rather than an explanation. Accept a related question and a problem that could be investigated by changing or comparing one thing.