

Clues or Ideas?

Separate what you notice from what you think it may mean.

SC.4.N.1.6 "Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB In paragraphs 2 and 3, underline each detail Maya directly saw or measured, and circle each statement that gives an idea beyond what Maya directly observed.

Maya's Pill Bug Notes

- ① Scientists keep records of what their senses or tools show. An observation tells what was seen, heard, smelled, touched, or measured. An inference is an idea that explains an observation. A careful notebook keeps these two kinds of statements separate. This helps another scientist know which details were recorded and which ideas still need more evidence.
- ② During recess, Maya placed a dry leaf in a clear tray and gently set a pill bug beside it. At 10:05, the pill bug walked under the leaf. Its antennae moved back and forth. Maya wrote that the tray was near a sunny window and that the room thermometer showed 24 degrees Celsius. She did not touch the pill bug.
- ③ Then Maya wrote, "The pill bug likes bright, warm places." She also wrote, "The pill bug may have gone under the leaf for shade, safety, or another reason." Maya added a second note: "The pill bug stayed under the leaf for five minutes." She planned to repeat the test on another day in places with different light and temperature.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Is the thermometer reading an observation or an inference? Explain why.

2 Which sentence gives a possible explanation for why the pill bug went under the leaf?

3 How is the note about staying under the leaf for five minutes different from the possible explanation about shade or safety?

4 What two conditions did Maya plan to change when she repeated the test?

3 YOUR TURN _____ Your own words

Choose a classroom object. Fill in all three rows. In the first column, record only what you can see, touch, hear, or measure. In the second column, write one possible idea that could explain each record, using words such as may or might.

WHAT I OBSERVED OR MEASURED	MY POSSIBLE IDEA OR INFERENCE

PART 1 • READ AND MARK

In paragraphs 2 and 3, underline each detail Maya directly saw or measured, and circle each statement that gives an idea beyond what Maya directly observed. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Is the thermometer reading an observation or an inference? Explain why.	It is an observation because Maya measured the room temperature with a thermometer.
2	Which sentence gives a possible explanation for why the pill bug went under the leaf?	"The pill bug may have gone under the leaf for shade, safety, or another reason."
3	How is the note about staying under the leaf for five minutes different from the possible explanation about shade or safety?	The five-minute note tells what Maya directly observed and timed. The shade or safety statement gives a possible reason that Maya did not directly observe.
4	What two conditions did Maya plan to change when she repeated the test?	Light and temperature.

PART 3 • YOUR TURN (SAMPLE ANSWER)

WHAT I OBSERVED OR MEASURED	MY POSSIBLE IDEA OR INFERENCE
The book's cover has a torn corner.	The book may have been used many times.
Three pages have folded corners.	A reader might have marked pages to return to.
The book is 2 centimeters thick.	The book may contain many pages.

Accept direct, sensory, or measured details in the observation column. Accept reasonable inferences that are clearly stated as possible ideas, not as certain facts.