

Worksheet: Observations and Inferences

(Frameworks Code)

Observing is using one or more of your five senses - sight, hearing, smell, taste, and touch - to gather information about the world. Information gathered from making observations is called **evidence or data**. Making and recording observations is one of the most basic skills in science.

qualitative observation - descriptions that do not use numbers

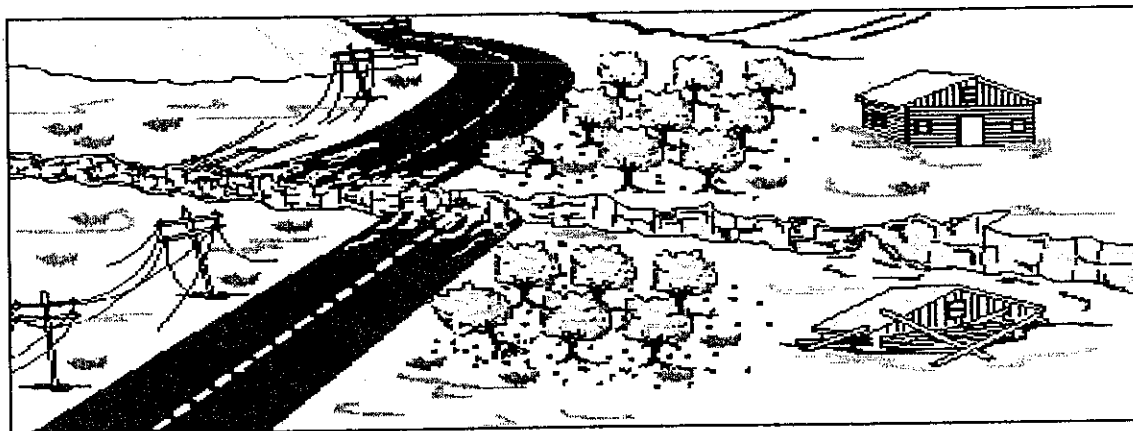
example: The marker board is white.

quantitative observations - descriptions that involve numbers (counted or measured).

example: There are 24 desks in the room.

Inferring, on the other hand, is explaining or interpreting an observation or statement. Inferences can be reasonable (logical) or unreasonable. A reasonable inference is one that makes sense, given what a person knows about the topic. One way to make an unreasonable inference is to conclude too much from the evidence.

Use the illustration below to answer the questions that follow.



1. Make and record four qualitative observations about the scene above.

- a.
- b.
- c.
- d.

2. Make and record four quantitative observations about the scene above.

- a.
- b.
- c.
- d.

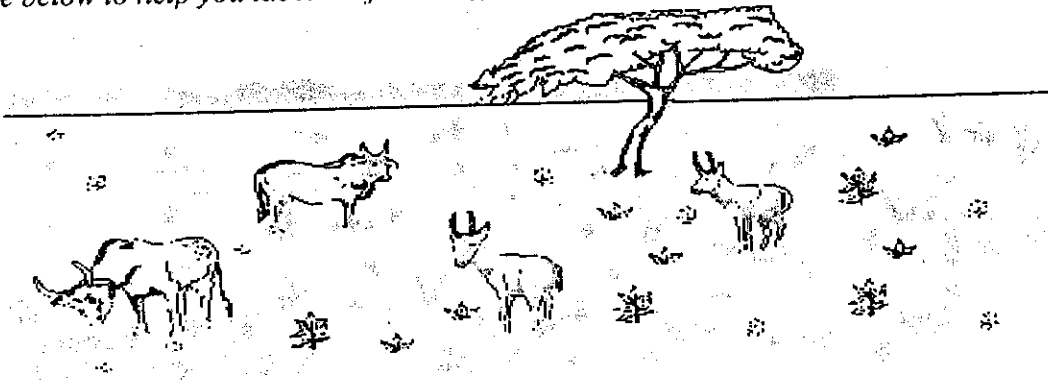
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3. Is the following statement an observation or an inference? "The house collapsed at the same time the telephone poles collapsed." Explain. _____

4. Is the following statement an observation or an inference? "The road is split into two pieces." Explain. _____

5. Is the following statement an observation or an inference? "The house is built on unstable land." Explain. _____

Use the picture below to help you label the following statements as observations or inferences.



6. The cattle and the antelope do not attack one another. _____

7. Some of the cattle are eating grass. _____

8. The antelope are looking around. _____

9. Trees do not grow well on this piece of land. _____

10. Most of the grass in the area is eaten by the cattle. _____