Write 5 observations about this picture.

Warm Up

Scientific Thinking

Thinking Skills – Skills that help a scientist attempt to understand the world around them

Observation vs. Inference

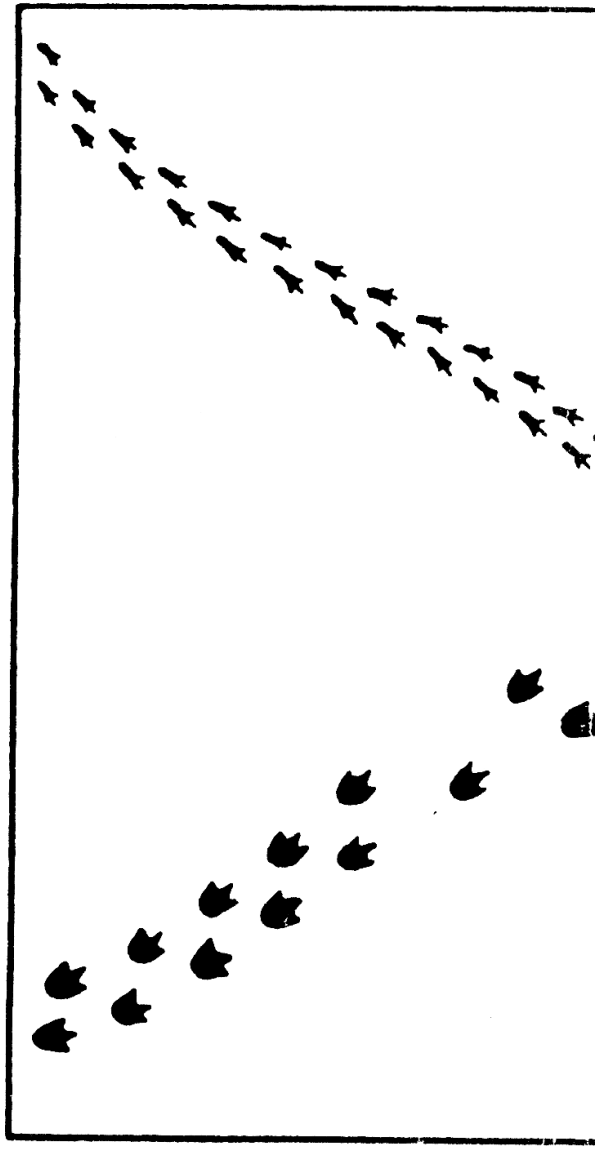
- An **observation** is the description of an event by using any or all of the five senses.
- Qualitative – describes the observation
- Quantitative – measures the observation

- An **inference** is a conclusion or judgment based on observations but arrived at indirectly rather than directly.
- Example:

A clear, odorless liquid can be inferred to be water.

- An inference can be tested by acting upon it.
- Example:

Tasting the liquid so as to observe that it tastes like water.

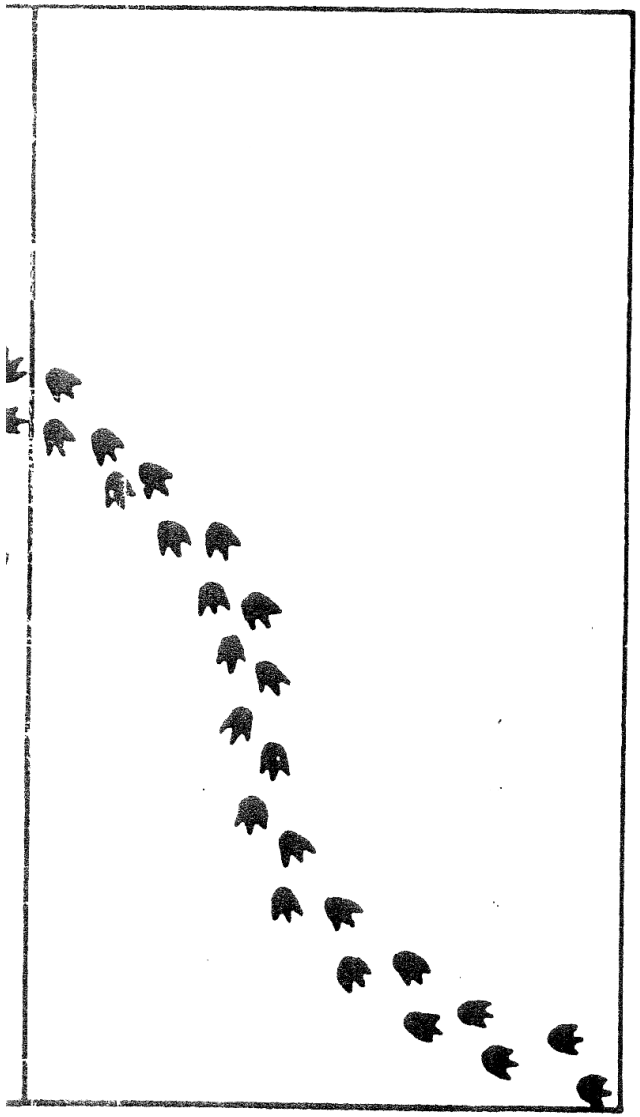


Position 1

List 4 observations and 4 inferences based on this picture.

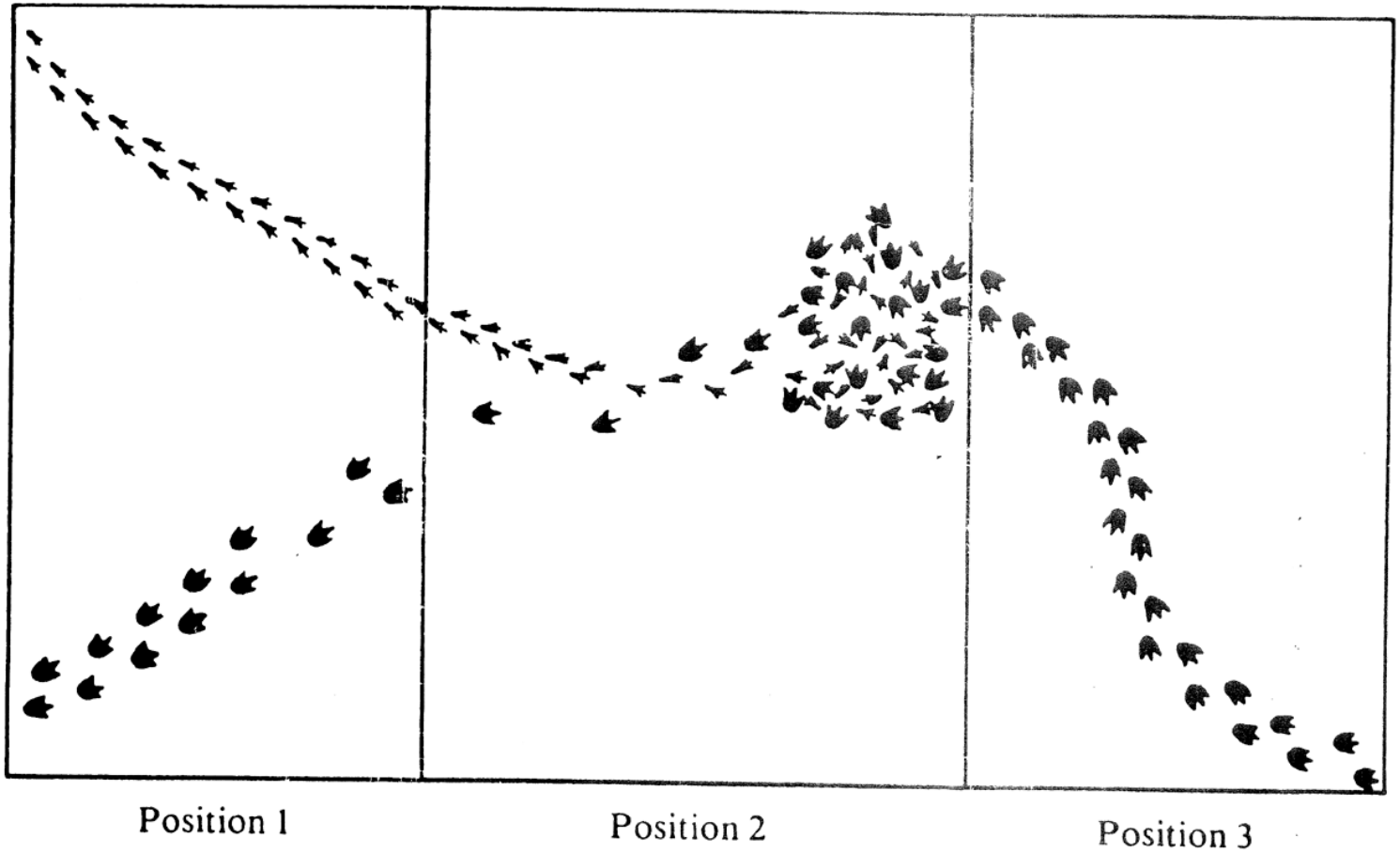
List 4 observations and 4 inferences based on this picture.

Position 2



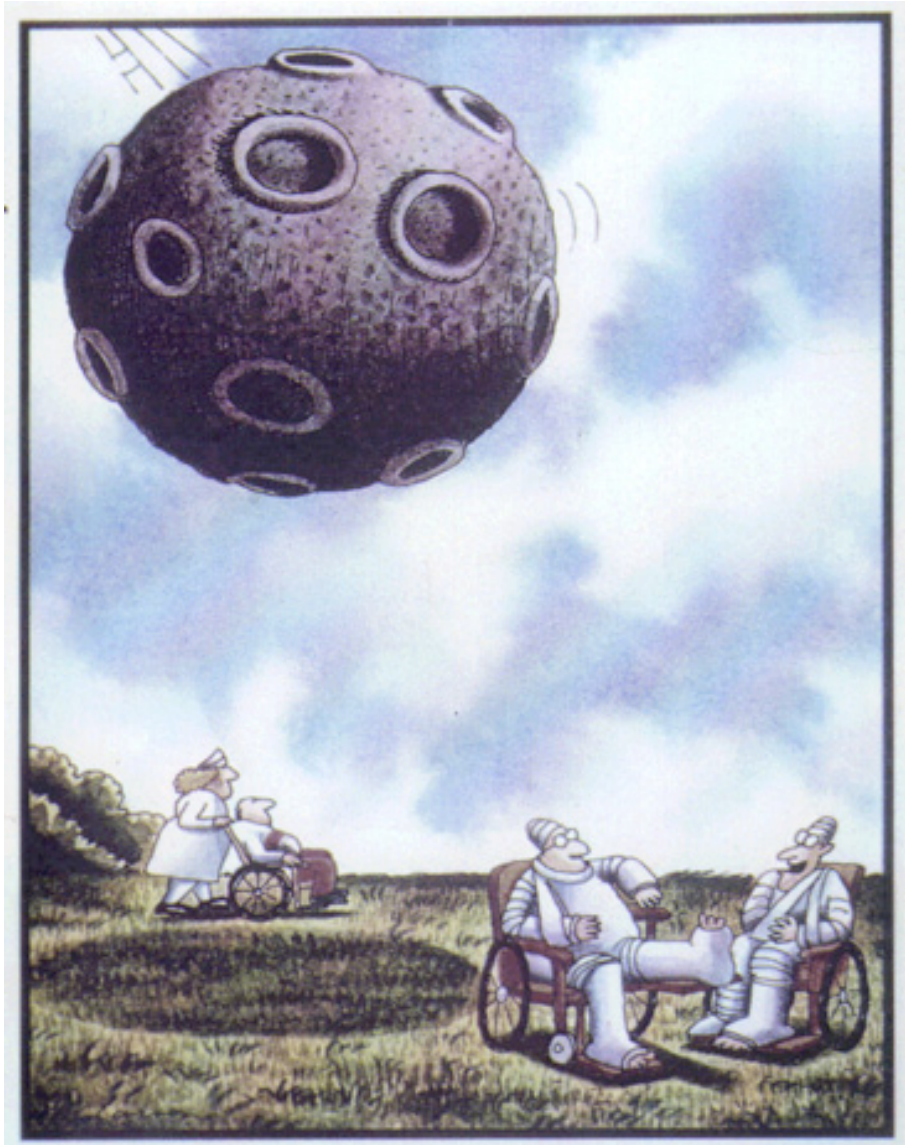
Position 3

List 4 observations and 4 inferences based on this picture.



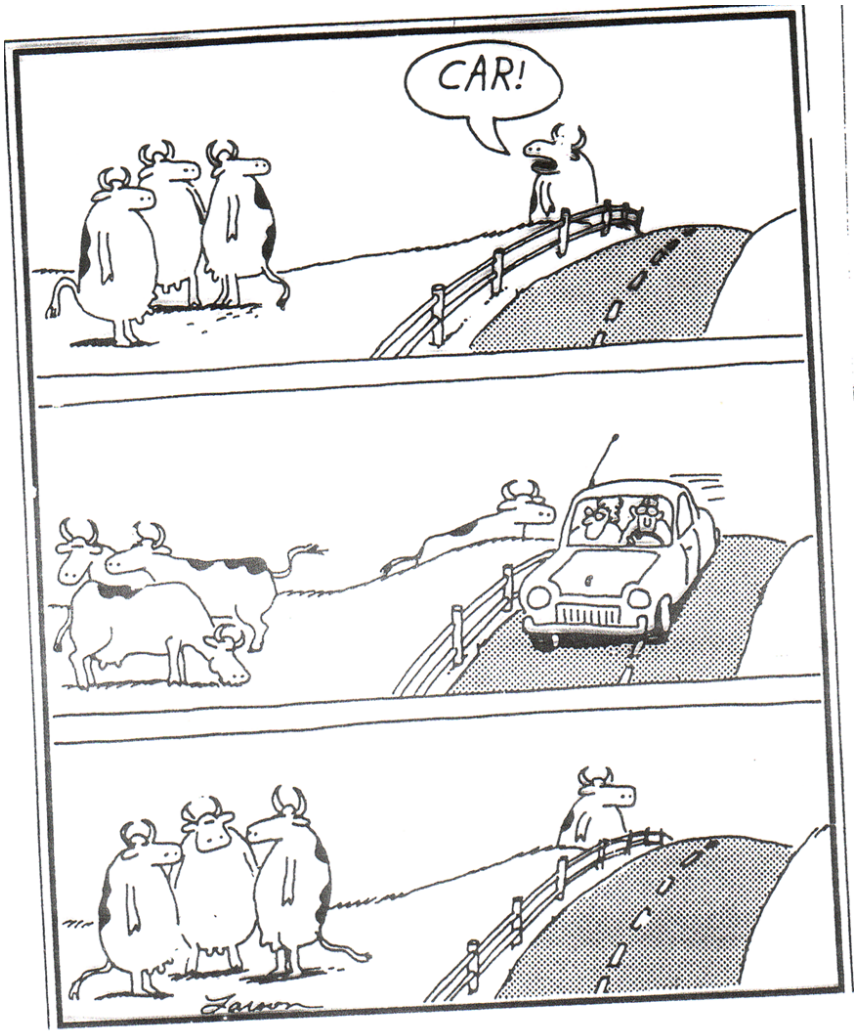
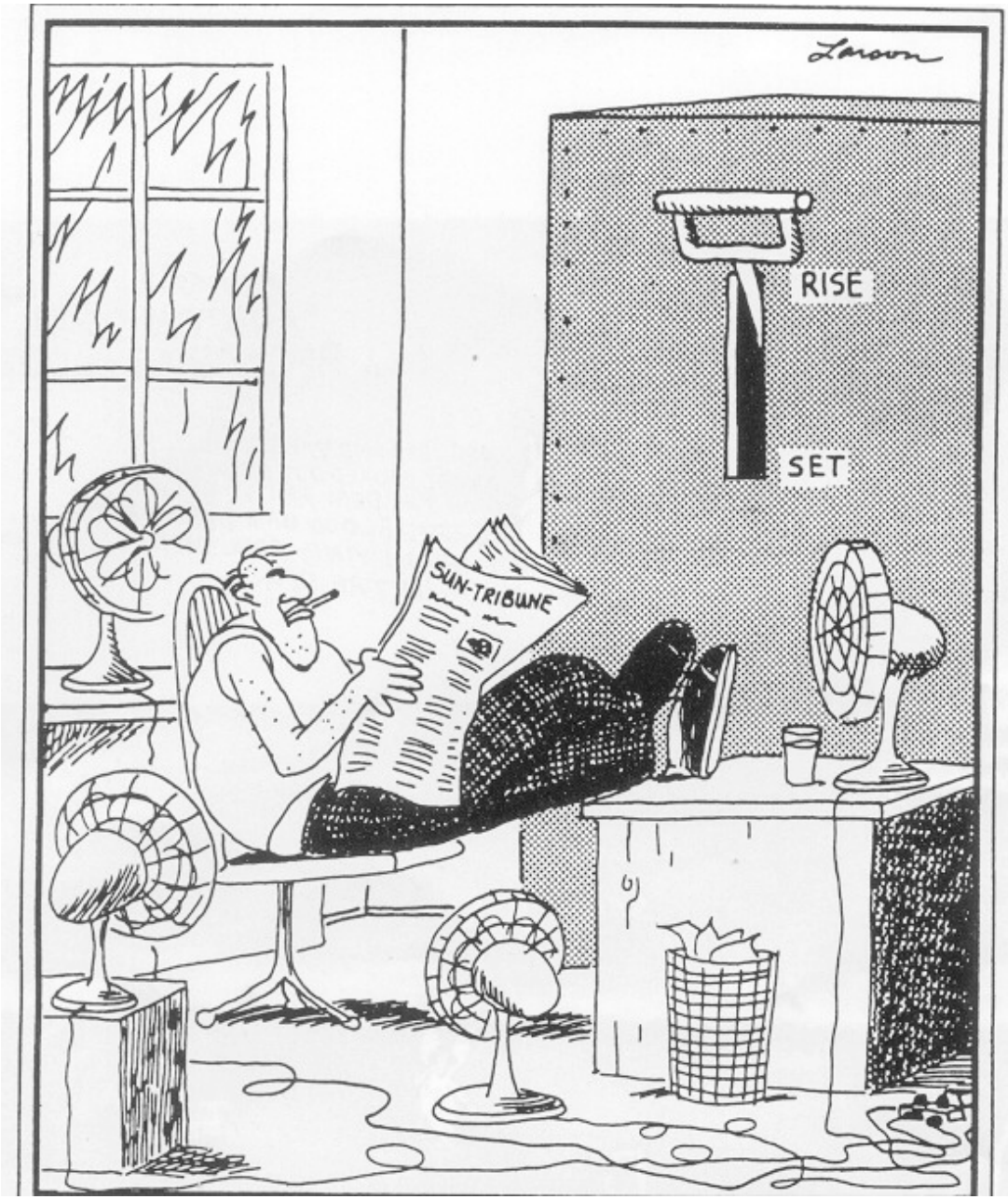
Does seeing the entire picture help you make better inferences? Why?

Make some observations (both qualitative and quantitative) and inferences based on this cartoon.



"You're kidding!...I was struck twice by lightning too!"

Make some observations (both qualitative and quantitative) and inferences based on this cartoon.



Make some observations (both qualitative and quantitative) and inferences based on this cartoon.