Observation or Inference?

Part I. Observation or Inference?

Directions: Read each statement and decide whether it is an observation or an inference. Did the person making each statement observe or infer what he or she stated? Circle your answers.

1. The container is filled to the 350 mL mark with water.
   - observation   - inference

2. The Sun rose at 6:54 this morning.
   - observation   - inference

3. The caterpillar did not eat the moth because it is not a carnivore.
   - observation   - inference

4. Sound traveled faster through the desk than through the air.
   - observation   - inference

5. The plant on the left is growing more because it has been receiving more water.
   - observation   - inference

6. When the Sun came out, it made the rain stop.
   - observation   - inference

7. I can jump high in tennis shoes because they have rubber on the bottom.
   - observation   - inference

8. When the power is turned on, the game lights up and plays a song.
   - observation   - inference

9. Dinosaurs died out when they could not adapt to the changing climate.
   - observation   - inference

10. Water can fall as precipitation, which may include rain, snow, or hail.
    - observation   - inference
Part II. Make Observations and Inferences

Directions: Look at the picture below. Then write three observations and two inferences, based on the picture.

1. (observation) ________________________________________________________________
   ____________________________________________________________________________

2. (observation) ________________________________________________________________
   ____________________________________________________________________________

3. (observation) ________________________________________________________________
   ____________________________________________________________________________

4. (inference) ___________________________________________________________________
   ______________________________________________________________________________

5. (inference) ___________________________________________________________________
   ______________________________________________________________________________
Observation or Inference?

Part I. Observation or Inference?

1. observation
2. observation
3. inference
4. observation
5. inference
6. inference
7. inference
8. observation
9. inference
10. observation

As a challenge, have students turn each observation into an inference and each inference into an observation.

Part II. Make Observations and Inferences

Observations and inferences will vary. Observations should be verifiable from direct evidence, with no interpretation required. Inferences should propose explanations or attribute reasons to statements. Samples are provided.

1. (observation) There are five penguins shown in the picture.
2. (observation) This habitat has water, ice, and snow.
3. (observation) Each penguin is black and white.
4. (inference) The penguins are fleeing a predator that can only hunt in the water.
5. (inference) More penguins are going to follow these five out of the water.