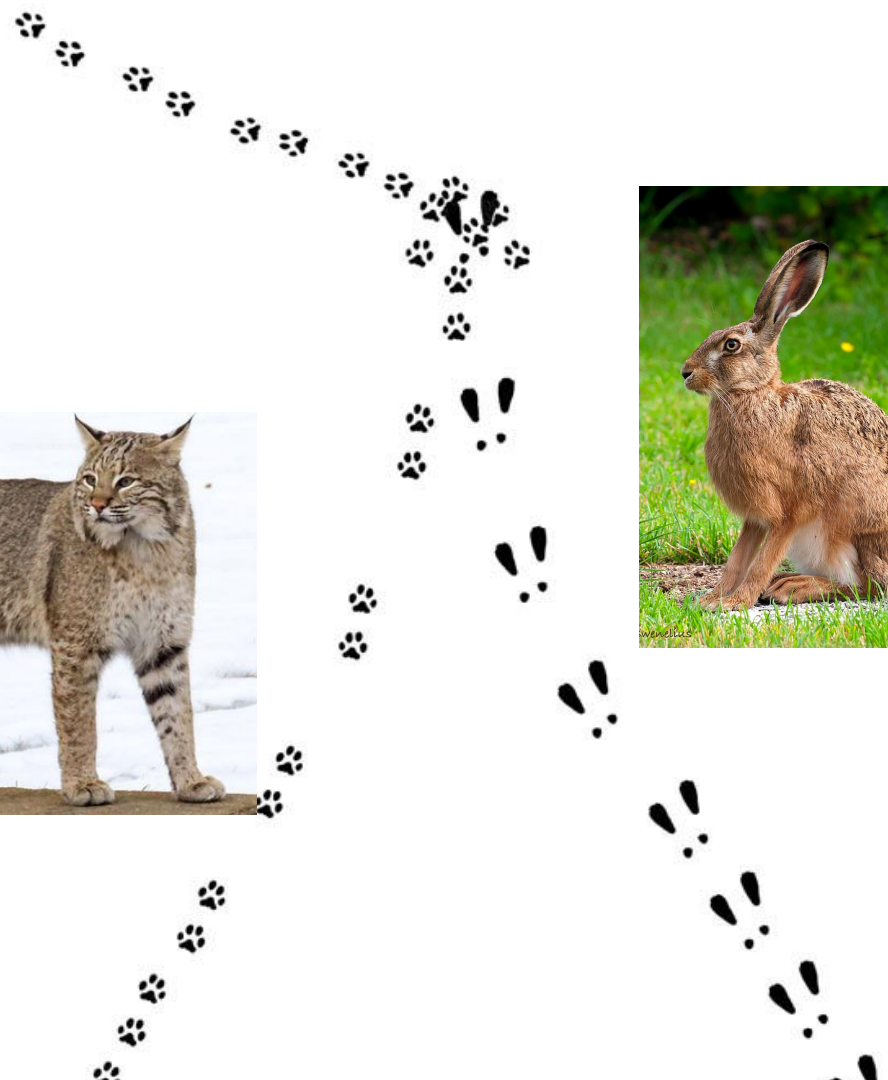


- **Inference**: a logical interpretation based on prior knowledge or experience



Determine which sentences are observations and which are inferences.



1. The water bottle is made of plastic.
2. The koala is thirsty.
3. The man is wearing a yellow jacket.
4. There are 10 trees visible.
5. This is located in Australia.
6. The koala is a wild animal.
7. The man is over 30 years of age.
8. The man cares about the koala.
9. The koala is approximately 2 feet in height.

Explaining & Interpreting Evidence

- **Hypothesis**: a proposed scientific explanation for a set of observations. (*hypotheses* plural)
- Generated using prior knowledge
- Able to be tested
- Can be supported and confirmed or dropped to form new hypotheses



Setting up a controlled experiment

Only ONE variable is changed at a time.

All other variables should be unchanged.

Manipulated (independent) variable:

changed variable

Responding (dependent) variable:

observed variable which responds to manipulated variable

Controlled variables: all other unchanged variables





Zero drops
of fertilizer




2 drops of
fertilizer



4 drops of
fertilizer



6 drops of
fertilizer

 = fertilizer