

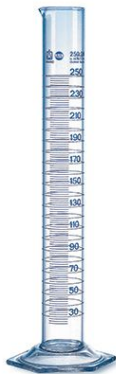
Today is Monday 8/12

Learning Target:

I can explain the difference between observations and inferences.

Warmup:

Name this equipment:



You will need:

- Pencil
- 2 Pieces of paper
- Turn in Why are we working hard?

What do scientists do?

What is an observation?

Make Observations - Demo

Share your observations with your group

After sharing with your group, pick 2 observations your group will share with the class:

What's an inference?

- At your table:
 - Cross off the “observations” you made that weren’t actually observations
 - The ones you crossed off were all centered on an *Inference* you made automatically.
 - As a group, define what an inference is.
 - Choose one person to share your definition of an inference.

- Observation: a fact you experience with one or more of your senses
- Inference: assumption based on observations

Activity #6- Observation and Inference

- * Make a T-Chart on your paper like the one below to organize your notes.

OBSERVATION	INFERENCE

- * Complete the half sheet by marking all observations “O” and Inferences “I”.

Observation



- * A noting and recording of.... *FACTS!!!*
- * Quantitative Observation: made with instruments such as rulers, balances, graduated cylinders, beakers, and thermometers. These results are measurable.
- * Qualitative Observation: use your senses to **observe** the results. (Sight, smell, touch, taste and hear.)

Inference

- * Conclusions based on observations.
- * drawing a conclusion from given evidence



Practice

Practice:

* Observations:

- I hear people screaming
- I smell cotton candy, popcorn, and hamburgers
- I see a lot of people

* Inference = ?

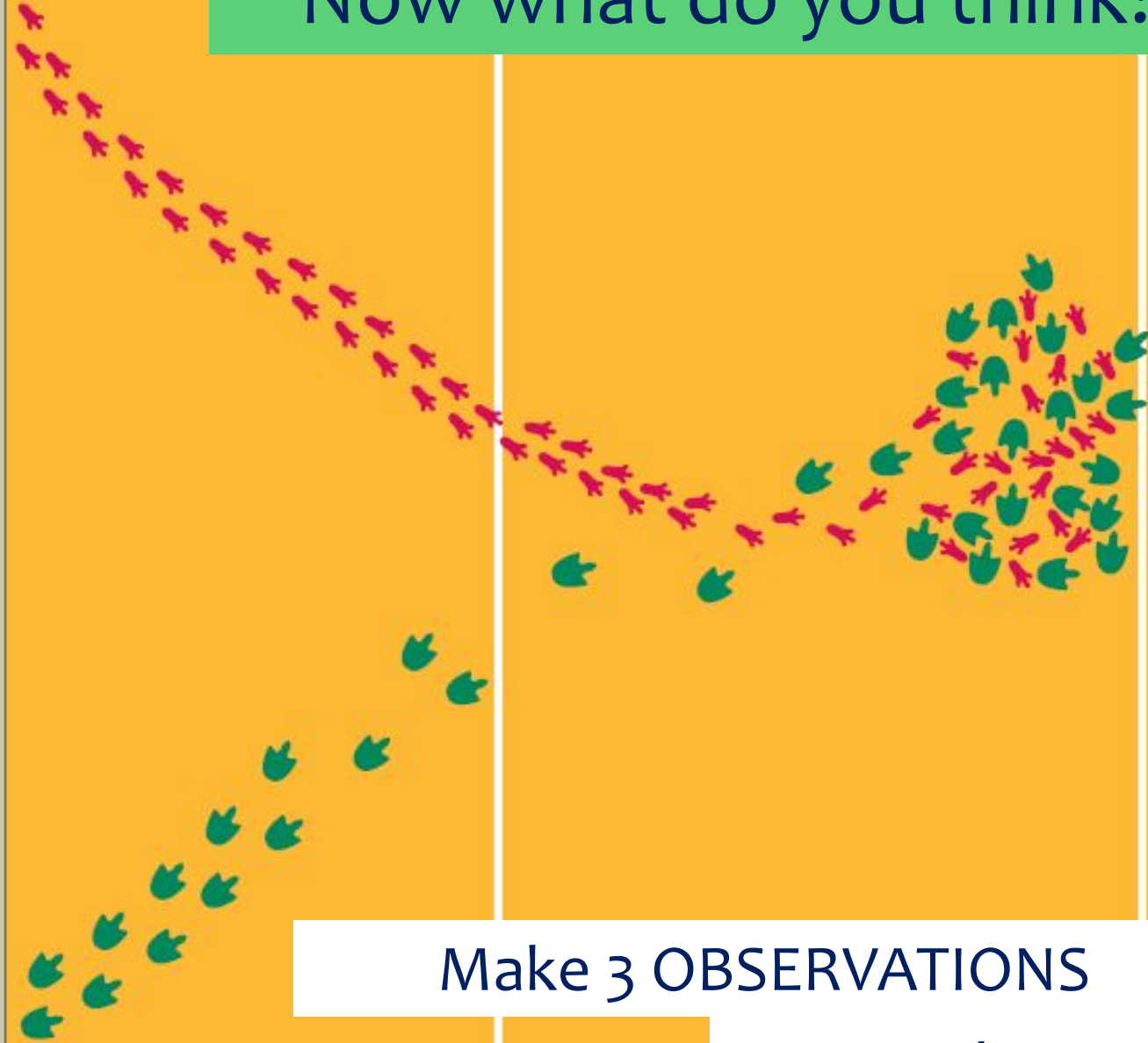


Look at these two sets of animal tracks.

Give 3 OBSERVATIONS

Make an INFERENCE

Now what do you think?



Make 3 OBSERVATIONS

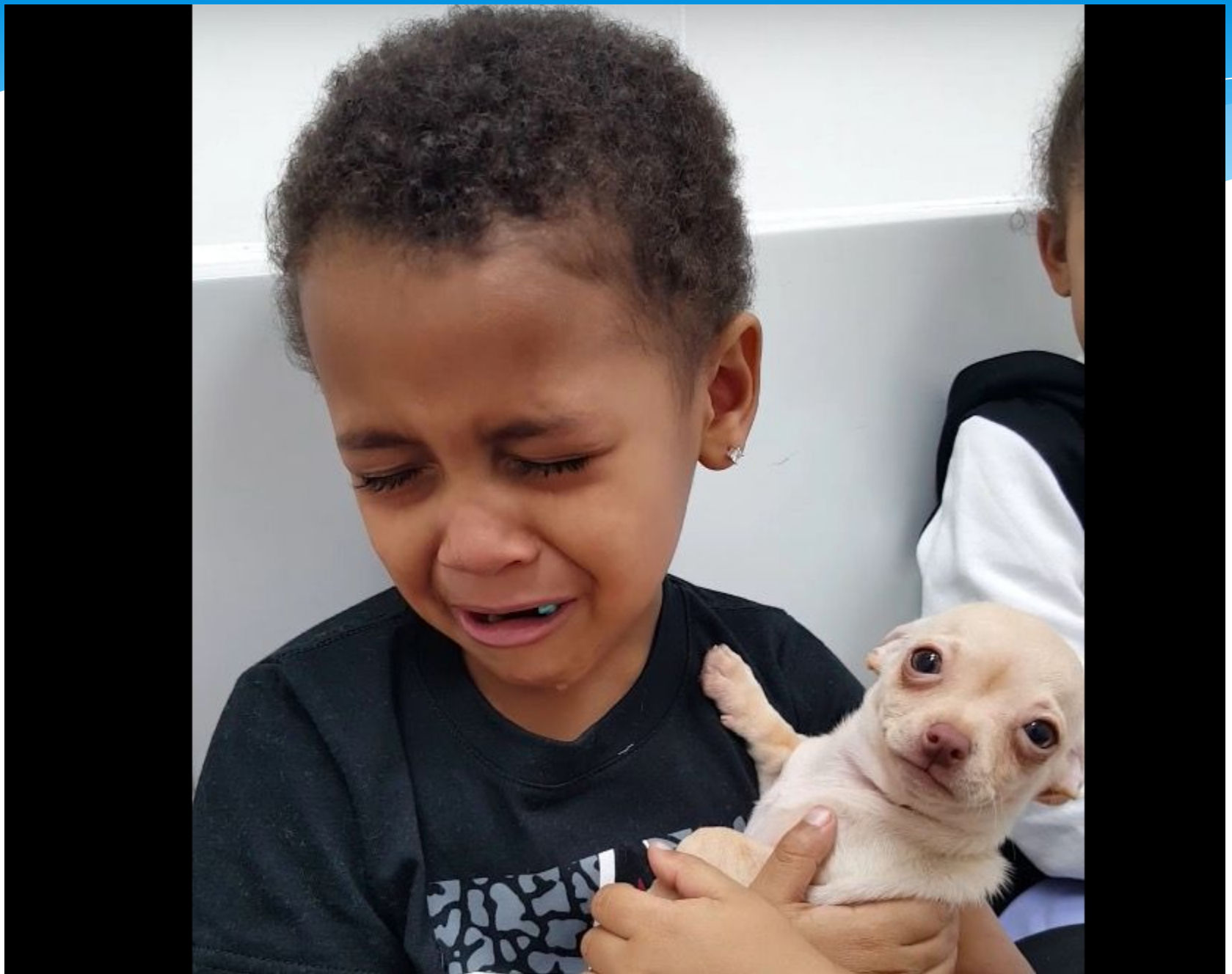
Make an INFERENCE

Now what do you think?



Make 3 OBSERVATIONS

Make an INFERENCE







With a shoulder partner:

Go through the list of “observations” and identify which ones are really observations (O) and which ones are actually inferences (I)

Learning Target:

I can explain the difference between observations and inferences and make observations to develop questions.

As you work, think about this:

- What rule could you come up with to easily identify an observation from an inference?

FILM CANISTER FUN!!

- Without looking inside of your canister, think of as many **OBSERVATIONS** as you possibly can.

NO CHEATING!!!!!!! 😊

POSSIBLE CONTENTS...

- PASTA
- MARBLES
- PENNIES
- PUSH PINS
- PAPERCLIPS
- WASHERS
- CORK
- BEANS
- RICE
- BEADS

Infer

**Make an INFERENCE about what might be in
your canister!**

Write it on your paper.

Infer & Compare

- a). Open canister carefully.
- b). Consider your observations. Did they include more than one of your 5 senses?
- c). Find one person with the same canister contents as you.
- d). Compare your lists of observations.
- e). Make an argument for any observations that are different.