

**Lesson 2 – Observation, Inference, & Classification**

THE FOLLOWING VIDEO HAS BEEN APPROVED FOR  
**ALL AUDIENCES**  
BY THE EARTH SCIENCE TEACHERS ASSOCIATION OF AMERICA, INC.

THE VIDEO HAS BEEN RATED

**I** INTELLIGENT  
UNDER 15 REQUIRES TEACHER  
ASSISTANCE


STRONG EARTH SCIENCE LANGUAGE, DETAILED  
DIAGRAMS, AND SUPER AWESOMENESS

- I can define Observation
- I can describe why we use Instruments
- I can define Inference
- I can describe Prediction
- I can describe Classification

### Observations

- Something detected by one or more HUMAN SENSES
- Sight, Hearing, Touch, Taste, or Smell
- Here & Now!


Example:  
My MOM'S LASAGNA!!!



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### Instrument

- Improve our ability to make observations & take measurements
  - Telescope - look closer at stars
  - Scale - measure's weight



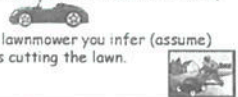
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### Inferences

- An interpretation of an observation
  - Making an ASSUMPTION
- Happened in the future or past

Examples:

- In the winter if you touch a car and it feels warm you infer (assume) that it had been on recently
- If you hear a lawnmower you infer (assume) that someone is cutting the lawn.



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### Prediction

- An inference based on observations

Example:



- Meteorologists make inferences all the time about storms coming our way.

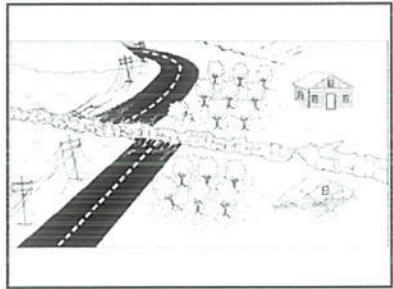
(Sometimes they are right and sometimes they are not!!)



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### When should you use observations & inferences?

<b>Observation</b> <ul style="list-style-type: none"> <li>• During a lab</li> </ul> 	<b>Inference</b> <ul style="list-style-type: none"> <li>• Writing a conclusion for a lab</li> </ul> 
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### Classification

- Observations & inferences are than grouped or organized by similarities

Examples:

- Minerals
- Natural Disasters
- Wardrobell



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