

Inference vs Observation Notes

Definition

Looking at someone/ something carefully to gain information

What do you observe?

(see, hear, smell, taste, feel, measure)

Examples

- Room is big
- Wall is big/tall
- there are sinks
- it is cold
- lights are 2m up
- Desk = 27.3m wide
- 19 in inside sink $\rightarrow 15 \text{ ft}^2$
- Lab counter = ~~29~~ 49m wide
- 13.5m faucet

Variations

Quantitative

quantity, amount
= numbers or counting or measure

Qualitative

quality
= descriptive, NOT #, Characteristics

Definition

Conclusions based on observed evidence, & reasoning

What is a logical explanation for what you observed?

Examples

- Conners shoes are comfortable
- Tenzar likes peacocks
- 6 duds wearing black: Black is popular

Variations

Informal inference
= educated guess, not scientific, unstructured

Hypothesis: educated guess to answer a scientific question.
Prediction