

Describe the Elephant



Observation should NOT include opinion

It weighs 480 kilograms.

It has large ears and long trunk.

It has gray wrinkly skin.

It is very cute!
It is young.
It is about 1.5 yards tall.

Qualitative vs Quantitative Data

QuaLitative (letters)

- Descriptions using words.
- Data which can be observed but not measured.
- What the object is *like*: texture, smell, taste, appearance, etc.

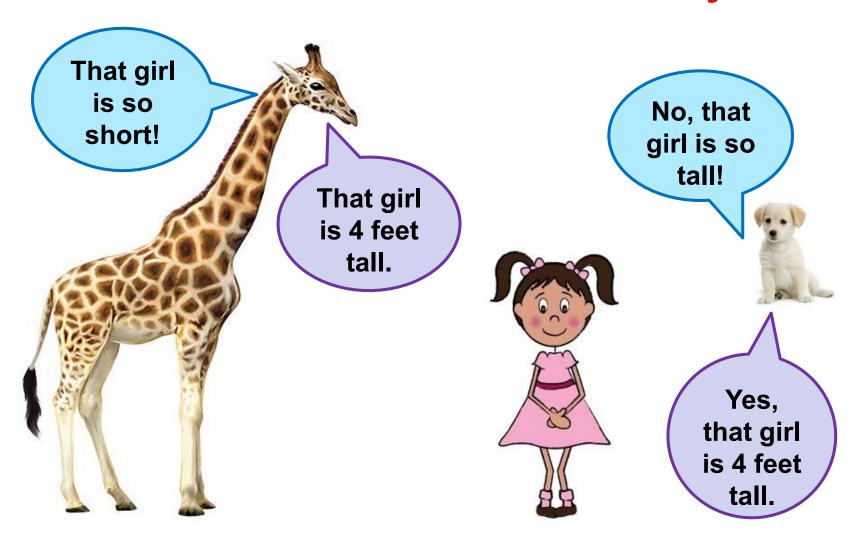
Subjective, relative

QuaNtitative (numbers)

- Specific numbers.
- Data which can be measured.
- Length, height, area, volume, weight, speed, time, temperature, humidity, sound levels, cost, age, etc.

Objective, specific

Qualitative observations are subjective



Quantitative observations are objective

Observation depends on observer

- Location and size of an observer
- Observer limitations





can only see visible light





can see ultraviolet light

Describe the Substances



TABLE SALT

S N O W

Describe the Crystals

