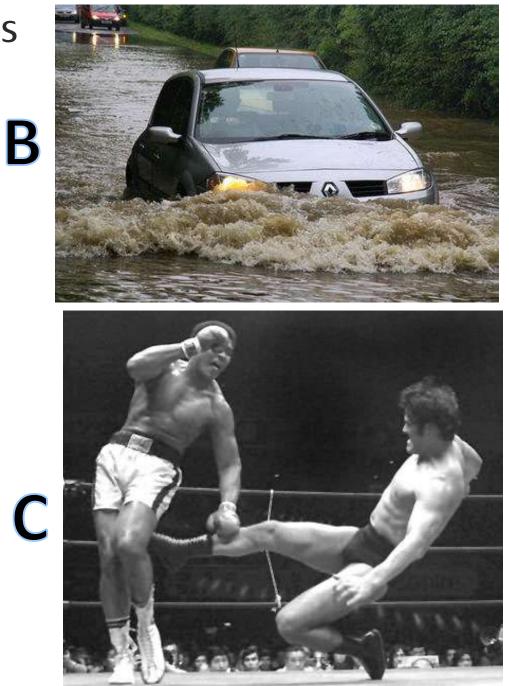# Do Now: Observations

A

B

C

A

B

C

- <u>Observation-</u> information gathered using one or more of the five senses.

Observations:
- People wearing helmets
- Two people in green and white
- One person in in black
- One person wear stripes
- Persons arms out like a T with a football in hand
- Persons arms above their head

Inference- an interpretation of one or more observations.

Inferences:
- The playier in black scored a touchdown
- #81 is tackling the player in black

- Qualitative observation- **deals with descriptions that can be observed but not measured**

- **Examples-** *Colors, textures, smells, tastes, appearance, beauty, etc*

- Quantitative observation- **an observation dealing with numbers that can be measured**

- ***Examples:*** *Length, height, area, volume, weight, speed, time, temperature, humidity, sound levels, cost, members, ages, etc.*

Example 1:

Oil Painting

Qualitative data:

- blue/green color, gold frame
- smells old and musty
- texture shows brush strokes of oil paint
- peaceful scene of the country
- masterful brush strokes

Example 1:

Oil Painting

Quantitative data:

- picture is 10" by 14"
- with frame 14" by 18"
- weighs 8.5 pounds
- surface area of painting is 140 sq. in.
- cost $300

Example 2:

Latte

Qualitative data:

- robust aroma
- frothy appearance
- strong taste
- burgundy cup

Example 2:

Latte

Quantitative data:

- 12 ounces of latte
- serving temperature 150° F.
- serving cup 7 inches in height
- cost $4.95

Qualitative or Quantitative?

1. Chemical A and chemical B reacted creating bubbles.

2. The chemical reaction realeased 10 joules of heat into the environment.

3. The beaker contained 10 mL less water that the previous day.

4. The brown rock is heavier than the black rock.

5. The bear has a number 3 shaved into its fur.

Directions

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