Name: _____
Date: _____ Core: _____

Notes—Observing/Inferring

Observation

Definition--Any _____ recorded during an _____. Done with our own - _____ or a variety of _____ such as a microscope or thermometer.

Purpose--To create and test _____

Two Types of Observations--_____ and _____

1) _____—uses only _____ to describe shape, texture, color, smell, taste, sound, quality or kind

   Ex: smooth, clear, rectangular, odorless, red, bumpy, thin*, microscopic*
   *although thin and microscopic describe size, they are not precise and therefore qualitative

2) _____ —can be expressed in _____ and is most likely _____ or _____

   Ex: 5 balloons, 30 g, 5 km, 2 hours, 22ºC, 300 million

Practice: Using the picture below, make as many observations as you like. Classify between qualitative and quantitative.

Qualitative	Quantitative

Name: _____
Date: _____ Core: _____

Definition--Provides an _____ for events we experience or _____ that we make

Purpose--Scientists infer to help make _____ of their environment

Things to remember—

- the only rule is to be logical and _____
- based on _____
- inferences can change when _____ information becomes available
- there may be _____ than one logical inference for any situation
- used to make _____

Ex: Tom was working on his lab in class when the lights went out and the teacher told everyone to return to their seats. He inferred that the _____ went out and the teacher didn't want anyone to get _____.

Practice: Provide a reasonable inference for the following observations:

1) You heard your neighbor setting off fireworks during the July 4th holiday in their backyard. The next morning, you noticed their storage shed in the backyard had burned down.
_____
_____
_____

2) Your lock was missing from your locker when you returned from electives.
_____
_____
_____

3) The car belonging to the family across the street has not been in their driveway for the last week but you have seen them at home.
_____
_____
_____