Science 8 Notes + Lesson Plan (Dec 10, 2019)

**Warm-up Question:**

* What kind of information is important to a crime scene investigator? What kind of information do they collect and why?

**Qualitative vs Quantitative Observations**

Qualitative Observations:

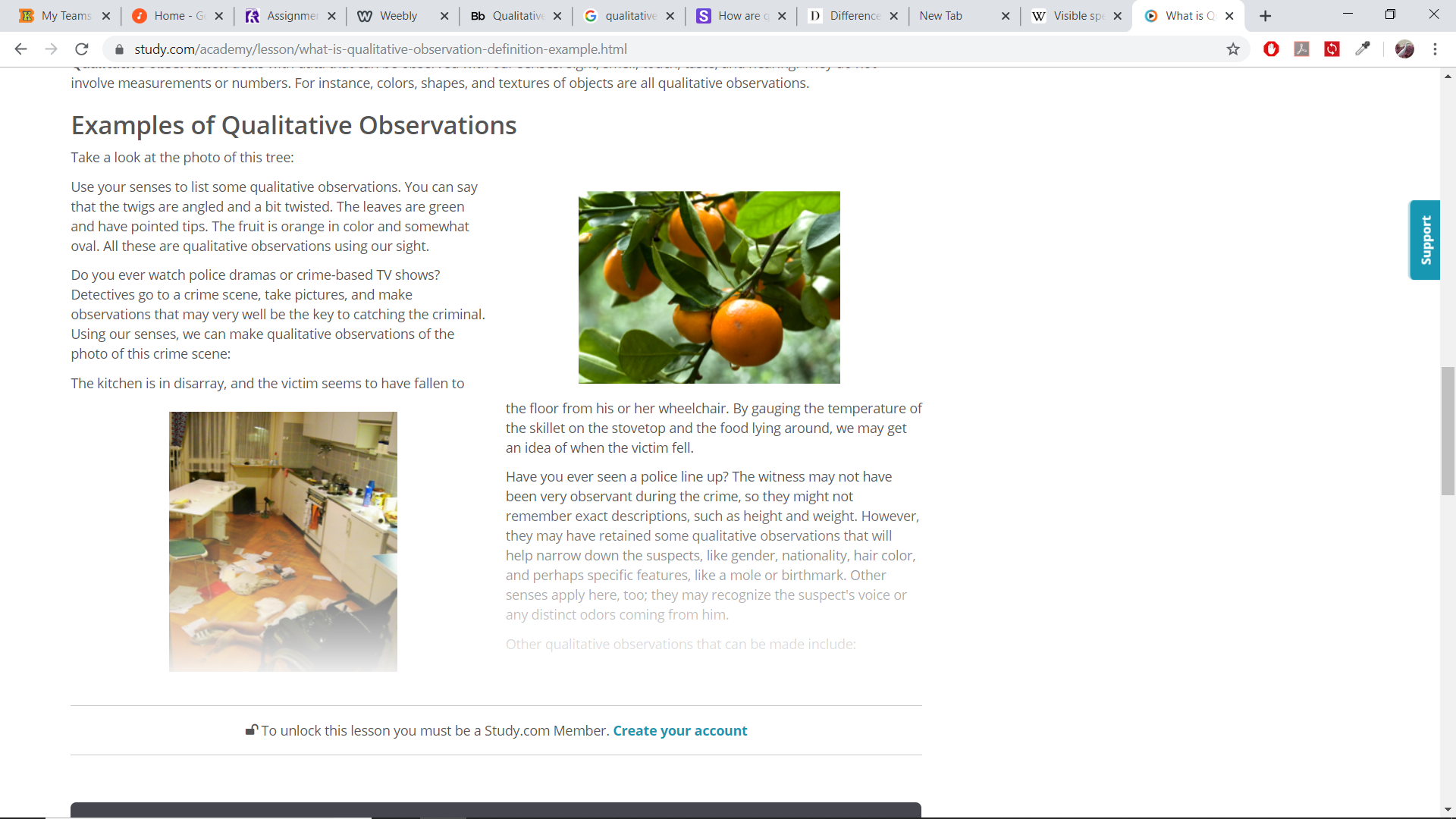
* Use your 5 senses (sight, smell, touch, hearing, taste) to observe the results.
* Descriptive, focuses on quality comparisons
  + E.g. “softer than”, “slower than”, “stringy”, etc.
* Subjective, may vary from person to person
  + E.g. colourblind observer will see differently
  + E.g. different people will choose different descriptive words
* Examples:
  + Cold to the touch, very fast, sinks to the bottom of a cup of water, pink

QuaNtitative Observations:

* Made using instruments such as rulers, balances, graduated cylinders, beakers, thermometers
* Measurable (numbers)
* Objective (less potential for human error)
* Examples:
  + 5ºC, 100 km/h, 3 g/mL, light with 700 nm wavelength

NOTE:

* Can describe the same thing with *both types* of observations
* Should describe things in as many ways as possible, using a combination of observation types: the more data the better!
  + Easier to graph quantitative observations, but qualitative ones are usually important for context



<https://study.com/academy/lesson/what-is-qualitative-observation-definition-example.html>