

Name: _____

Key

Qualitative vs Quantitative Observations

Qualitative observations are made when you use your senses to observe the results. (Sight, smell, touch, taste and hear.)

Quantitative observations are made with instruments such as rulers, balances, graduated cylinders, beakers, and thermometers. These results are measurable.

Read the following examples and then decide if the example is qualitative (1) or quantitative (2). Write your answer on the line.

QLT. It is light green in color.

QLT. It tastes sour.

QNT. One leaf is 9 cm long.

QLT. It makes a loud pop sound.

QNT. The mass of the computer is 1.5 kg.

QLT. It smells sweet.

QNT. The temperature of the room increases by 8 °C.

QLT. It gets darker over a period of time.

QNT. The flower clusters in 3 blooms.

QLT. It feels very rough.

QLT. The plant is short.

QLT. Leaves are stiff.

QNT. The veins are 3 mm wide.

Write a *qualitative* example: The students are wearing short sleeved, collared shirts.

Write a *quantitative* example: Twelve of the 18 students have blue shirts on.

What type of observation do you think is more scientific and why?

QNT; Numeric observations are quantifiable facts. Therefore, less subjective than descriptive observations (QLT).