

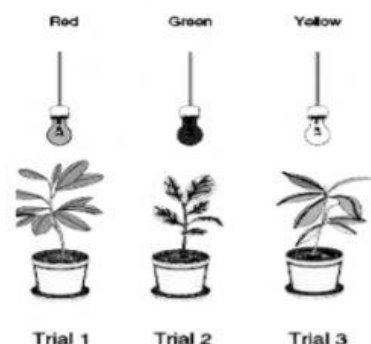
Benchmark 4 Study Guide

- Elements in the same _____ or _____ have the same number of valence electrons.
- What would happen to the speed of the motion of the particles in a gas as it is cooled?

- Classify each as an Element, Compound, or Mixture.
 - _____ $C_6H_{12}O_6$
 - _____ Air
 - _____ O – Oxygen
 - _____ Two of more substance NOT chemically combined or in a specific ratio
 - _____ Pure Water H_2O
 - _____ Two or more substances combined in a specific ratio
 - _____ Table Salt $NaCl$
 - _____ Two or more substances combined physically
 - _____ $NaHCO_3$
 - _____ A substance that cannot be broken down into any other substance.

- You set up an experiment to test the hypothesis that plants grow faster in Red light. Identify each as: **C**- constant, **CN** – control, **IV** – Independent Variable, **DV**-Dependent Variable.

- _____ pot type
- _____ the color of light
- _____ the amount of water
- _____ the height of the plant
- _____ the fertilizer.
- Look at the picture, what else should be constant?



- Use the graph to answer the questions.
(I-increase, D-Decrease, RTS-Remains the same.)

- _____ During phase change temperature
- _____ During phase change energy
- _____ From a solid to a liquid the space between the particles.
- _____ As a liquid changes to a gas the space between the particles.

