

True-False: place a "+" in the blank if the statement is true, and a "O" in the blank if the statement is false.

1. Dalton's atomic theory stated:
 - a. atoms are indivisible. _____
 - b. all atoms of the same element are alike. _____
 - c. atoms unite in small, whole number ratios to form compounds. _____

2. The Greek philosopher Democritus was one of the first to suggest the existence of atoms. _____

3. The word "atom" means invisible. _____

4. A theory is an explanation of observable facts and phenomena. _____

5. Aristotle supported the idea of the atom. _____

6. From the "gold-foil" experiment it was concluded that the atom is mostly empty space. _____

Short Answer and Fill in the Blanks:

1. What must models and theories do in order to remain valid?
 - a.

 - b.

2. The "gold-foil" experiment had the following results: _____ of the alpha particles were deflected, _____ of the alpha particles were reflected, and _____ of the alpha particles passed through the gold foil.