**Chemistry Honors**

**Section 3-1 and Part of Section 3-2**

1. The 1 states that mass is neither created nor destroyed during chemical reactions and chemical changes.
2. The 2 states that a chemical compound contains the same elements in exactly the same proportions by mass regardless of the size of the sample or the source of the compound.
3. John Dalton reasoned that elements were composed of 3 and that only 4 of atoms can combine to form compounds.
4. According to Dalton’s theory, atoms are combined, separated, or 5 during chemical reactions.
5. The atom is composed of three subatomic particles. The two particles in the nucleus are the 6 and 7 . The particle not inside the nucleus is the 8 .
6. The scientist who performed the cathode ray tube (CRT) experiment was 9 .
7. In the CRT experiment, the cathode ray deflected away from the 10 pole of the electric field, showing that the cathode ray has a 11 charge.
8. The model of the atom that is consistent with the results of the cathode ray tube experiment has 12 embedded in a sea of 13 charge.
9. The ratio that was developed by the scientist who performed the CRT experiment is called the 14 ratio.
10. The scientist named 15 determined the mass of the electron using charged oil droplets.