

6. A plane flies 3000km from Hawaii to Los Angles in 6 hours what is the velocity of the plane? Include the direction. \_\_\_\_\_ <sup>Unit</sup> km km/hr hr km/hr east km/hr west km/hr north
7. Newton's First Law of Motion states an object at rest will \_\_\_\_\_ at rest and/or an object in motion \_\_\_\_\_ in motion unless acted upon by a(n) \_\_\_\_\_ force. This is also known as the Law of \_\_\_\_\_.
8. Families on the periodic table are in (columns, rows) and periods are in (columns, rows).
9. Newton's Second Law of Motion states that force is equal to \_\_\_\_\_ times \_\_\_\_\_.
10. In this equation  $\text{MgCO}_3 \longrightarrow \text{MgO} + \text{CO}_2$ , the reactants are **MgCO<sub>3</sub>** **MgO** **CO<sub>2</sub>** and the products are **MgCO<sub>3</sub>** **MgO** **CO<sub>2</sub>**
11. Select True or False next to each statement. All nonmetals (except hydrogen)
- \_\_\_\_\_ are found pure in nature.
  - \_\_\_\_\_ are liquids at room temperature
  - \_\_\_\_\_ are all very reactive
  - \_\_\_\_\_ are found right of the zig-zag line on the periodic table.
12. Select True or False next to each statement concerning nuclear energy.
- \_\_\_\_\_ a small amount of matter produces a large amount of energy
  - \_\_\_\_\_ Nuclear fusion occurs on the sun.
  - \_\_\_\_\_ Nuclear fission happens when nuclei join.
  - \_\_\_\_\_ Nuclear fusion happens when two hydrogen combine to form a helium and release a tremendous amount of energy.
  - \_\_\_\_\_ Nuclear fusion is happens when nuclei are split.
  - \_\_\_\_\_ radioactive waste is a product of nuclear fission.
  - \_\_\_\_\_ During nuclear fission an atom splits are releases a large amount of energy. Which is used in nuclear power plants to produce low cost electrical energy.
  - \_\_\_\_\_ One advantage of nuclear energy is that it produces almost no air pollution.
13. If your mass on Earth is 60kg what would your mass on the moon be? \_\_\_\_\_ kg
14. If you through a baseball upward it will travel upward until gravity forces it back to Earth. This is best explained by which one of Newton's Laws? \_\_\_\_\_