

Physics Vocabulary ~ Chapter 4 A

- **Air Resistance Force** ~ F_{air} , The air resistance is a special type of frictional force that acts upon objects as they travel through the air.
- **Applied Force** ~ F_{app} , An applied force is a force that is applied to an object by a person or another object. If a person is pushing a desk across the room, then there is an applied force acting upon the object. The applied force is the force exerted on the desk by the person.
- **Coefficient of Friction** ~ μ , the ratio of the force of friction between two objects immediately before sliding to the normal force
- **Contact Force** ~ those types of forces that result when the two interacting objects are perceived to be physically contacting each other. (Spring Force, Applied Force, Air Resistance Force, Normal Force, Tension Force, & Frictional Force)
- **Drag Force** ~ a type of friction that refers to forces acting opposite to the relative motion of any object moving with respect to a surrounding fluid.
- **Electromagnetic Force** ~ A type of physical interaction that occurs between electrically particles.
- **Equilibrant** ~ a counterbalancing force or system of forces.
- **Equilibrium** ~ the state in which the net force on an object is zero
- **Field Force** ~ those types of forces that result even when the two interacting objects are not in physical contact with each other, yet are able to exert a push or pull despite their physical separation. (Magnetic Force, Electrical Force, & Gravitational Force)
- **Force** ~ An action exerted on a body in order to change the body's state of rest or motion; force has magnitude and direction
- **Force diagram** ~ diagrams that show the force vectors as arrows.
- **Free body diagram** ~ diagrams used to show the relative magnitude and direction of all forces acting upon an object in a given situation.
- **Frictional Force** ~ F_{frict} , The friction force is the force exerted by a surface as an object moves across it or makes an effort to move across it.