Name: _____

Period: _____

IPC Physics Final Review Vocab

Velocity and Acceleration

1. ***Variable***	A. One time an experiment is run.	1. Linear	A. The variable on the vertical axis (y-axis).
2. ***Experiment***	B. A setup used to gather data and knowledge.	2. Independent variable	B. The slope of a speed vs. time graph.
3. Data Table	C. A list of information from an experiment.	3. Dependent variable	C. The variable on the horizontal axis (x-axis).
4. ***Trial***	D. A part of an experiment that can be changed or manipulated.	4. ***Slope***	D. A type of graph that looks like a straight line.
5. ***Procedure***	E. How an experiment is actually conducted.	5. ***Speed***	E. The measure of the steepness of a line.
		6. ***Acceleration***	F. The slope of a position vs. time graph.

Newton's Laws

1. Inertia	A. An action that can causes motion.	1. Weight	A. When all forces on an object are balanced.
2. Friction	B. Force pulling all object toward each other.	2. Equilibrium	B. The force of gravity on an object.
3. Gravity	C. Any force that resists motion. Causes heat.	3. Mass	C. The acceleration of gravity.
4. Net force	D. Total of all of the forces on an object.	4. Heat	D. The a product of friction.
5. Force	E. Ability of an object to resist change of motion.	5. g	E. The measure of the matter in an object.
1. Newton's First Law	A. For every action there is an equal an opposite reaction.		
2. ***Momentum***	B. Momentum does not change in a closed system OR $m_L v_L = m_R v_R$		
3. Newton's Second Law	C. Measure of the product of an object's mass and velocity; has to be moving.		
4. Newton's Third Law	D. Objects at rest stay at rest and objects in motion stay at motion unless acted on by a net force.		
5. ***Law of Conservation of Momentum***	E. Force equals mass times acceleration.		

Work and Energy

1. Energy	A. Uses energy and can create energy.	1. Thermal	A. Energy of the atom being split or fused.
2. Power	B. Energy of motion; dependent on mass and velocity.	2. Nuclear	B. Energy cannot be destroyed or created, just transformed.
3. Work	C. Energy of position; dependent on height, mass, and gravity.	3. Radiant	C. Energy of moving electrons.
4. Kinetic Energy	D. The rate of doing work; how fast you do work.	4. Mechanical	D. Heat energy. Also caused by friction.
5. Potential Energy	E. Has the ability to create forces; stored work.	5. Law of Conservation of Energy	E. Light energy—electromagnetic radiation.
		6. Chemical	F. Energy (kinetic or potential) stored in object and can do work.
		7. Electrical	G. Energy of molecular bonds.

Magnetism and Heat

1. Magnet	A. Anything that attracts or repels another magnet or magnetic material.	1. Conduction	A. Heat transfer through electromagnetic waves.
2. Electro magnet	B. The area in which magnets will feel magnetic force. More arrows show a stronger one.	2. Thermal Equilibrium	B. Will allow heat or electricity to move.
3. Magnetic field	C. A magnet made from electricity going through wrapped wires.	3. Radiation	C. Thermal (heat) transfer by the contact (touching) of two objects.
4. Generator	D. Forcing energy into wires by moving magnets.	4. Convection	D. Transfers heat by moving currents in gases and liquids.
5. Motor	E. Uses energy to cause electromagnets to turn and do work.	5. Thermo dynamics	E. When two objects are at the same temperature.
6. Magnetic Induction	F. Uses work to spin magnets and make energy.	6. Insulator	F. Will resist heat and electricity.
		7. Conductor	G. The study of how heat moves.

Electricity

1. Electricity	A. Slows down the flow of electricity.	1. Fuse	A. A circuit with a break in it; no electricity will flow.
2. Current	B. Pushes electricity through a circuit.	2. Circuit breaker	B. Has independent paths for the electricity.
3. Electrically neutral	C. Electricity can flow through this.	3. Parallel Circuit	C. Has only one path for the electricity.
4. Resistance	D. A circuit that has a wire across a device which causes it to go off.	4. Series Circuit	D. A device that breaks to protect against excessive current. Must be replaced.
5. Voltage	E. The flow of electricity through a circuit.	5. Open Circuit	E. Protects against high current, but can be reset.
6. Short Circuit	F. Electrons flowing in circuits.	6. Closed Circuit	F. A circuit that has no breaks in it; electricity can flow in it.
	G. An object that has equal amounts of positive and negative charges.		