## Non-Contact Forces \& Electromagnetism Quiz: Tuesday, October 17, 2017

## Non-Contact Forces

- What do all not-contact forces have in common?


## Gravitational Force

- What two factors affect the strength of gravity between two objects?
- Explain the difference between mass and weight. Know what would happen to each if you went to another planet or the moon. (Short answer question!)
- How does gravity affect the motion of objects?
- Why do objects in space orbit one another? (What force is involved?)
- Explain the "acceleration due to gravity" picture (apple falling from the tree or rock being dropped off the ledge)


## Magnetic Force

- What happens to magnetic force if you increase/decrease the distance between two magnetic objects?
- Where is a magnet the strongest? Where is it the weakest?
- Recognize the magnetic field diagrams for opposite poles and for like poles
- What happens when two like poles interact? What happens when opposite poles interact?
- Between what kinds of objects can magnetic force be exerted?


## Electrical Force

- What happens to electrical force if you increase or decrease the distance between charged particles?
- Recognize the electrical field diagrams for opposite charges and for like charges
- How do objects become charged? What happens to the number of electrons?
- What happens when 2 like charges interact? What happens when opposite charges interact?
- Between what kinds of objects can electrical force be exerted?


## Essential Vocabulary:

(This is not a vocabulary test, but you should understand the following terms and be able to apply them!)

Magnitude
Force
Newton
Net Force
Balanced Forces
Unbalanced Forces
Gravitational Force (Gravity)
Air Resistance/Drag
Magnetic Force (Magnetism)
Poles: North and South
Attract
Repel
Electrical Force

Static Electricity
Charge: Positive and Negative
Electrons/Protons
Contact Force
Non-Contact Force

## Mass

Weight
Field
Distance
Gravitational Field
Magnetic Field
Electric Field

