



Force and Motion Study Guide



Test on: Wednesday, January 31st

1. Vocabulary-Be able to match the words with their definitions.

- Pull-** when an object moves towards another object.
Push- when an object moves away from another object.
Friction- the force from two objects rubbing together.
Speed- the time it takes to move something.
Work- when something is being done.
Gravity- the force that pulls us to Earth.
Force- an object moves when a push or pull is used.
Motion- any change in the position of an object.



2. Short Response Questions-

- A. Explain the difference between walking on carpet and on a tile floor (there is more friction on the carpet than the tile).
- B. Name a tool that is useful when measuring speed (stopwatch)
- C. Name an action that shows gravity is happening. (objects falling to the ground when you drop them)
- D. How were you able to lift your teacher? (using a lever when the fulcrum is closer to the load than the force)
- E. Explain why a piece of paper would take longer to fall to the ground than a tennis ball. (A flat piece of paper will have more air pushing up on it, which causes it to take longer to fall).
- F. Between a bowling ball and a paperclip, which would hit the ground the hardest? (The bowling ball because it has more mass).
- G. In the roller coaster activity, where would a marble move slowest and fastest? (The slowest is when it is going up the hill, and fastest when going down the hill because of the applied force).
- H. When do magnets attract to each other? (When opposite sides are toward each other).
- I. When do magnets repel each other? (When like, or the same sides, are toward each other).

