

ROLLER COASTER VOCAB

DIRECTIONS: Define the following words and draw a **color** picture.

1. **CENTRIFUGAL FORCE** – the force **outwards** when moving in a circle (really Newton’s First Law of Motion).
2. **CENTRIPETAL FORCE** - the force **inwards** when moving in a circle.
3. **TERMINAL VELOCITY** – **Maximum velocity** (speed) something can fall on Earth (120 mph for humans).
4. **UP STOPS** – small wheels on a roller coaster that help keep it on the track.
5. **G FORCE** – “Gravitational Force” the increase of experienced (felt) force when something accelerates while turning and/or accelerating away from the Earth.
6. **FREEFALL** – freely falling in a gravitational field (feel weightless) (gravity is only force acting on object* (*and air))
7. **AIR RESISTANCE**- friction (force) that slows object moving through the air (atmosphere).
8. **ACTION FORCE** – the “**push**” or “**pull**” applied to an object to cause it to move.
9. **REACTION FORCE** – the **result** of a “push” or “pull”. The movement of the object in the opposite direction.
10. **NORMAL FORCE** - The **support force** exerted upon an object which is in contact with another object. (Usually upward and/or **perpendicular** to the object).
11. **ROLLING FRICTION** – friction force that is experienced by an object that is rolling (like a bike tire rolling on the ground or a roller coaster wheel on the track) (less than static friction).
12. **STATIC FRICTION** – friction force that is experienced by or applied to an object that is not moving (greater than rolling or sliding friction).