Learning the Language

1. The **GRAVITY** force between your coaster and the earth pulls you down the roller coaster.
2. The greater a coaster's **WEIGHT** the stronger the tracks must be to support it.
3. You increase a coaster's **MASS** by adding more passengers.
4. A roller coaster peak is shaped in a curve called a **PARABOLA** so that you will feel like you are falling freely as you go over the top of the hill.
5. Roller coaster hills are shaped so that you will feel almost **WEIGHTLESS** as you ride over them.
6. You gain enough **MOMENTUM** falling down a roller coaster hill to keep you going all the way to the top of the next hill.
7. You feel **ACCELERATION** as you gain speed rolling down a roller coaster hill.
8. You feel **DECELERATION** as you lose speed climbing a roller coaster hill.
9. As your speed increases going down a roller coaster hill, you gain **KINETIC ENERGY.**
10. Your coaster has the most **POTENTIAL ENERGY** when it is at the highest point.
11. You feel a **FORCE** on you back as the coaster seat pushes against you.
12. Your body's **INERTIA** causes you to be slung forward when you stop suddenly at the end of a roller coaster ride.
13. Roller coaster tracks are tilted inward to give **CENTRIPETAL FORCE** which pushes the coaster toward the center of the curve.
14. The rubbing between coaster wheels and the track causes a **FRICTION** force which slows the coaster down.
15. Your **VELOCITY** increases as you roll down a roller coaster hill.

Using the Language

1. As you roll over a peak, you rise off you seat and you feel _____.
2. The shape of a roller coaster hill is called a _____ .
3. As you fall down a roller coaster hill, you _____ .
4. The force of _____ pulls you down the roller coaster peaks.
5. The _____ force slows you down throughout you trip.
6. When you are the highest above the ground, you have the most _____ .
7. When you are moving the fastest, you have the most _____ .
8. Because of your speed at the bottom of the hill, you have enough _____ to climb to the top of the next hill.
9. An inward _____ is required to make you turn.
10. Your body has _____ and therefore, tries to move in a straight line when the roller coaster track turns.
11. An empty coaster and a loaded coaster will travel down a hill at the same speed. Therefore we can say a coaster's speed is not affected by its _____.

INERTIA	GRAVITY
PARABOLA	ACCELERATE
MOMENTUM	MASS
WEIGHTLESS	FRICTION
POTENTIAL ENERGY	KINETIC ENERGY
CENTRIPETAL FORCE	

More Using the Language

1. The gravity pull between an object and the earth (or another large body) is called _____.
2. The amount of material a body contains is its _____.
3. A condition in which an object has no weight is called _____.
4. A curved path produced by a falling body is called a_____.
5. The force of attraction between all bodies in the universe is called _____.
6. The energy that an object has because of its position is called_____.
7. An increase in speed is called_____.
8. The energy that an object in motion has is called_____.
9. A decrease in speed is called_____.
10. A measure (mass $*$ velocity) of the force of a moving object is it's _____.
11. The tendency of an object to remain at rest or in motion unless acted upon by a force is called _____.
12. A push or pull is a _____.
13. A force pulling an object toward the center of its' circular path is called _____.
14. Resistance to motion due to one object rubbing against another object is called ._____.
15. An object's speed in a given direction is called its _____.

GRAVITY	ACCELERATION
CENTRIPETAL FORCE	VELOCITY
MASS	KINETIC ENERGY
PARABOLA	DECELERATION
FORCE	POTENTIAL ENERGY
FRICTION	MOMENTUM
WEIGHT	INERTIA
WEIGHTLESSNESS	