**Physics Chapter 6.1-6.3 Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**


Across

1. This part of a projectile's speed is always changing because of gravity.

3. Law of Universal \_\_\_\_\_ describes the relationship between mass, distance and force.

5. Distance a projectile travels.

8. At what angle should you kick a soccer ball if you want to have the greatest range? (spell the number)

9. The path of a projectile.

11. An object that moves through the air affected only by gravity.

12. Two kids are sitting on a merry-go-round. The kid on the outer horse will have a greater \_\_\_\_\_\_ but the same angular speed.

13. If the distance between two planets were to increase the gravity would \_\_\_\_.

14. Fake force to explain your own inertia trying to carry you out of a circle.

Down

2. Shape of planet's orbits around the sun.

4. Keeps the moon in orbit around the earth.

6. An inward \_\_\_\_\_\_ force is needed to keep an object moving in a circle.

7. Object that orbits the earth.

10. When an object moves around an external axis.

A go cart is driving around a circular track with a radius of 25m. If the time around the track is 95 seconds what is the go cart’s speed?

If the cart and rider have a mass of 1335 kg, what centripetal force is required to keep the go-cart in the circle?