

## Circular Motion

- An object traveling in a circle is an interesting circumstance.
- **An object traveling in a circular path is constantly accelerating.**
- **It is constantly accelerating because it has to keep turning to maintain that circular path.**
- If you are driving a car, you notice that you have to keep turning the steering wheel to keep in a circle.
- The speed of an object traveling in a circle would be the distance traveled divided by the time taken.
- If an object made multiple revolutions around the circle, the distance would be determined by taking the number of revolutions times the circumference of the circle.
- Remember that displacement is the starting position minus the ending position.
- **If an object made one revolution around a circle and its final position was the same as the initial position, its displacement is "0."**
- **Even if an object is traveling at a constant speed (uniform motion) around the circle, it is still accelerating because it is constantly changing its direction.**