

Describing Motion Notes

Motion: Describing Position

Position is the location of an object or “place”

Motion is the change in position

To describe position you need to start with:

Reference point- a location that you can compare to other locations

Then you have to give:

Direction- left, right,

Distance- how far or near to that reference point

How to describe motion...

- Direction: up, down, left, right
- Compare it to something that is NOT moving
- How fast or slow...
- Changes in speed or direction

- All motion is “relative” ...it depends on what you are comparing it to OR where you are watching from...

- Example:
- Sitting at your desk, how fast are you moving?
 1. **Relative to the ground: Zero. You're not moving relative to the frame of reference of the ground.**
 2. **Relative to the sun: You are spinning along with the Earth**

Example:

- Traveling on a airplane...
- Sitting in the plane- you are not moving compared to the seat or the floor of plane
- Someone looking at the plane from the ground...you are moving fast away compared to the ground

Apparent Motion

- When something appears to be moving but it is not
- Examples:
- You see the sun “appear” to move in the sky
- You see the moon and it appears to be following you