# Velocity-Time Graphs: Constant Velocity Motion Lesson Notes

A constant velocity (non-accelerating) object is an object that never changes its velocity.

#### **Constant Velocity vs. Changing Velocity:**

- Constant velocities are represented by horizontal lines (1 and 3).
- Changing velocities (accelerations) are represented by diagonal lines (2 and 4).

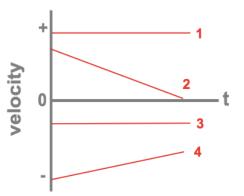
# **Positive (+) Velocity vs. Negative (-) Velocity:**

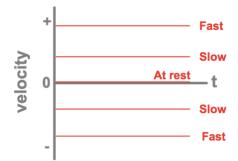
- Objects with positive velocities are displayed in the + region (1 and 2).
- Objects with negative velocities are in the region (3 and 4).

#### Slow-Moving Object vs. Fast-Moving Object:

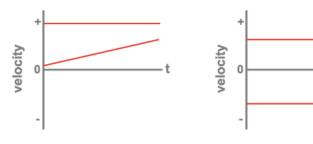
A slow object has a small velocity and a fast object has a larger velocity.

- The closer the line is to 0, the slower the object is.
- The farther the line is from 0, the faster the object.





# Summary

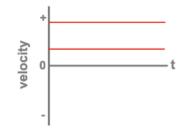


Constant velocity: horizontal line

Changing velocity: diagonal line.

**Positive velocity**: above time axis.

Negative velocity: below time axis.



Fast-moving object: further from time axis.

Slow-moving object: closer to time axis.