

Motion

Overview Sheet

Essential Question

How do we describe motion?

Vocabulary

position	reference point	motion	speed
velocity	vector	acceleration	momentum

Learning Targets

(Objectives)

1. Explain the relationship between position and motion
2. Compare and contrast speed and velocity
3. Explain how velocity is an example of a vector
4. Describe the relationship between velocity and acceleration
5. Describe the relationship between velocity and momentum
6. Interpret and create various graphs dealing with distance or velocity and time

Helpful Websites

- http://www.physics4kids.com/files/motion_intro.html (motion overview)
- <http://phet.colorado.edu/en/simulation/moving-man> (motion interactive simulator)
- <http://concord.org/activities/subject/physics?gclid=CMjng8mK3bYCFYef4Aodf1KANQ> (interactive motion activities)
- http://www.classzone.com/books/ml_science_share/vis_sim/mfm05_pg7_relmotion/mfm05_pg7_relmotion.html (relative motion simulation)
- <http://zonalandeducation.com/mstm/physics/mechanics/kinematics/xvaVsTime/xVsTime.html> (position-time interactive graph)
- <http://www.absorblearning.com/media/item.action;jsessionid=AD87B475F4DF9509CEDCC58131854DF4?quick=wo> (distance-time interactive graph)
- <http://www.fearofphysics.com/Xva/xva.html> (position, velocity, acceleration overview)
- <http://www.physicsclassroom.com/Class/1DKin/U1L1d.cfm> (speed and velocity overview)
- <http://aspire.cosmic-ray.org/javalabs/java12/fnm/act1/lab.htm> (interactive speed lab)
- <http://www.absorblearning.com/media/item.action;jsessionid=5B3EE2A5377D8B5715447867E1CF5234?quick=wq> (velocity-time and stopping distance interactive graph)
- <http://www.physicsclassroom.com/Class/1DKin/U1L1e.cfm> (acceleration overview)
- http://www.classzone.com/books/ml_science_share/vis_sim/mfm05_pg31_acceleration/mfm05_pg31_acceleration.html (acceleration simulator)
- <http://www.physicsclassroom.com/class/momentum/u4l1a.cfm> (momentum overview)