

Forces

Overview Sheet

Essential Question

How do forces impact objects?

Vocabulary

force

net force

centripetal force

gravity

orbit

friction

air resistance

inertia

Newton's 1st Law

Newton's 2nd Law

Newton's 3rd Law

Learning Targets

(Objectives)

1. Explain what a force is
2. Compare and contrast the different types of forces (contact, gravity, friction)
3. Explain how force is an example of a vector
4. Describe how unbalanced forces impact an object's motion
5. List and describe Newton's Three Laws

Helpful Websites

- http://www.physics4kids.com/files/motion_force.html (force overview)
- http://www.classzone.com/books/ml_science_share/vis_sim/mfm05_pg39_force/mfm05_pg39_force.html (interactive force simulator)
- <http://phet.colorado.edu/en/simulation/forces-and-motion-basics> (interactive force simulator)
- <http://www-tc.pbs.org/wgbh/buildingbig/lab/swf/forces.swf> (interactive forces lab)
- <http://www.sciencekids.co.nz/gamesactivities/friction.html> (friction game)
- <http://www.physicsclassroom.com/Class/newtlaws/> (Newton's Laws overview)
- <http://zonalandeducation.com/mstm/physics/mechanics/forces/newton/newton.html> (Newton's Laws overview)
- <http://zonalandeducation.com/mstm/physics/mechanics/forces/galileo/galileoInertia.html> (inertia overview)
- http://www.classzone.com/books/ml_science_share/vis_sim/mfm05_pg50_newton/mfm05_pg50_newton.html (Newton's 2nd Law interactive simulator)