

Honors Science 8



Physical Science: Forces

Honors Science 8 Curriculum

Power Objective

P.O. #1: Demonstrate how forces can change the motion of an object. (P.O. #1 Proficiency Rubric)

Academic Vocabulary

<input type="checkbox"/> free body diagram	<input type="checkbox"/> kinetic friction	<input type="checkbox"/> normal force
<input type="checkbox"/> force	<input type="checkbox"/> reference point	<input type="checkbox"/> velocity
<input type="checkbox"/> Isaac Newton	<input type="checkbox"/> net force	<input type="checkbox"/> acceleration
<input type="checkbox"/> drag	<input type="checkbox"/> magnitude	<input type="checkbox"/> vector
<input type="checkbox"/> inertia	<input type="checkbox"/> speed	<input type="checkbox"/> displacement

Enduring Understandings

Students understand that...

- Forces have magnitude and direction.
- Forces can change motion.
- When the net force is zero there is no change in an object's motion.
- Motion is measured and calculated with respect to a reference point and apparent motion changes depending on the reference point from which it is viewed.

Essential Questions

- How do we determine motion?
- Do forces affect motion?
- How do we quantify forces and motion?