

<b>Adventures in Aeronautics</b>			
<b>2006 Science</b>			
<b>Learning Standards</b>			
<b>District of Columbia Science</b>			
<b>Grade 4</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Adventures in Aeronautics	DC	SCI.4.1.2	Explain that clear communication is an essential part of the process of scientific inquiry because it enables scientists to inform others about their work, to expose their ideas to evaluation by other scientists, and to allow scientists to stay informed about scientific discoveries around the world.
Adventures in Aeronautics	DC	SCI.4.6.8	In spite of some similarities, explain how the electrostatic force and the magnetic force are not the same thing.
<b>Adventures in Aeronautics</b>			
<b>2006 Science</b>			
<b>Learning Standards</b>			
<b>District of Columbia Science</b>			
<b>Grade 5</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Adventures in Aeronautics	DC	SCI.5.4.4	Explain that the air around us is matter and has weight (a force) and exerts pressure; explain that air pressure varies a little from place to place and from time to time.
Adventures in Aeronautics	DC	SCI.5.6.2	Demonstrate that if the forces acting on an object are balanced so that the net force is zero, the object will remain at rest if it is initially at rest or will maintain a constant speed and direction if it is initially moving.
Adventures in Aeronautics	DC	SCI.5.6.3	Investigate and describe that unbalanced forces cause changes in the speed and/or direction of motion of an object (acceleration).
Adventures in Aeronautics	DC	SCI.5.6.4	Describe that, for an object moving in a straight line, acceleration, $a$ , is the change in velocity, $v$ , divided by the time, $t$ , that change takes ( $a = v \div t$ ).
Adventures in Aeronautics	DC	SCI.5.6.5	Investigate and describe that the greater the net force, $F$ , applied to a body, the greater its acceleration, $a$ . Describe that the greater the mass, $m$ , of an object, the smaller the acceleration produced by a given force.
<b>Adventures in Aeronautics</b>			
<b>2006 Science</b>			
<b>Learning Standards</b>			
<b>District of Columbia Science</b>			
<b>Grade 5 (New Grade 5)</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	

Adventures in Aeronautics	DC	SCI.5.3.1	Give examples of technology, such as telescopes, microscopes, and cameras, that enable scientists and others to observe things that are too small or too far away to be seen without them and to study the motion of objects that are moving very rapidly or are hardly moving.
Adventures in Aeronautics	DC	SCI.5.5.5	Explain that the air around us is matter and has weight (a force) and exerts pressure; explain that air pressure varies a little from place to place and from time to time.
Adventures in Aeronautics	DC	SCI.5.9.2	Demonstrate that if the forces acting on an object are balanced so that the net force is zero, the object will remain at rest if it is initially at rest or will maintain a constant speed and direction if it is initially moving.
Adventures in Aeronautics	DC	SCI.5.9.3	Describe that unbalanced forces cause changes in the speed and/or direction of motion of an object (acceleration).
Adventures in Aeronautics	DC	SCI.5.9.5	Describe that the greater the net force, $F$ , applied to a body, the greater its acceleration, $a$ . Describe that the greater the mass, $m$ , of an object, the smaller the acceleration produced by a given force.
Adventures in Aeronautics	DC	SCI.5.9.6	Demonstrate and explain that things on or near Earth are pulled toward Earth's center by the gravitational force that Earth exerts on them.