Smart Skies			
2009 Science			
Core Curriculum			
Iowa Science			
Grades 3-5			
Activity/Lesson	**State**	**Standards**	
Fly by Math	IA	SCI.3-5.1.5.1	Mathematics is used to gather, organize and present data and to construct convincing explanations.
Fly by Math	IA	SCI.3-5.3.5.1	The motion of an object can be described by its position, direction of motion, and speed. That motion can be measured and represented on a graph.
Fly by Math	IA	SCI.3-5.3.5.2	Changes in speed or direction of motion are caused by forces. The greater the force, the greater the change in motion. The more massive an object, the less effect a given force will have in changing its motion.
Line Up with Math	IA	SCI.3-5.3.5.1	The motion of an object can be described by its position, direction of motion, and speed. That motion can be measured and represented on a graph.
Line Up with Math	IA	SCI.3-5.3.5.2	Changes in speed or direction of motion are caused by forces. The greater the force, the greater the change in motion. The more massive an object, the less effect a given force will have in changing its motion.
Smart Skies			
2009 Science			
Core Curriculum			
Iowa Science			
Grades 6-8			
Activity/Lesson	**State**	**Standards**	
Fly by Math	IA	SCI.6-8.1.2.4	Students formulate questions, design investigations, execute investigations, interpret data, use evidence to generate explanations, propose alternative explanations, and critique explanations and procedures.
Fly by Math	IA	SCI.6-8.3.3.1	The motion of an object can be described by its position, direction of motion, and speed. That motion can be measured and represented on a graph.
Line Up with Math	IA	SCI.6-8.3.3.1	The motion of an object can be described by its position, direction of motion, and speed. That motion can be measured and represented on a graph.
Line Up with Math	IA	SCI.6-8.3.3.3	If more than one force acts on an object along a straight line, then the forces will reinforce or cancel one another, depending on their direction and magnitude. Unbalanced forces will cause changes in speed or direction of an object's motion.

Smart Skies			
2009 Science			
Core Curriculum			
Iowa Science			
Grades 9-12			
Activity/Lesson	**State**	**Standards**	
Fly by Math	IA	SCI.9-12.3.3.5	Objects change their motion only when a net force is applied. Laws of motion are used to calculate precisely the effects of forces on the motion of objects. The magnitude of the change in motion can be calculated using the relationship F = ma, which is independent of the nature of the force. Whenever one object exerts force on another, a force equal in magnitude and opposite in direction is exerted on the first object.
Line Up with Math	IA	SCI.9-12.3.3.5	Objects change their motion only when a net force is applied. Laws of motion are used to calculate precisely the effects of forces on the motion of objects. The magnitude of the change in motion can be calculated using the relationship F = ma, which is independent of the nature of the force. Whenever one object exerts force on another, a force equal in magnitude and opposite in direction is exerted on the first object.