

**Pushing the Envelope**

**2007 Science**

**Grade Level and High School Content Expectations**

<b>Michigan Science</b>			
<b>Grade 5</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
History of Aviation Propulsion (pgs. 5-9)	MI	SCI.5.S.RS.05.1 9	All students will analyze claims for their scientific merit and explain how scientists decide what constitutes scientific knowledge; show how science is related to other ways of knowing; show how science and technology affect our society; and show how people of diverse cultures have contributed to and influenced developments in science. Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.
Physics and Math (pgs. 43-63)	MI	SCI.5.P.FM.05.3 1	Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects. Describe what happens when two forces act on an object in the same or opposing directions.
Physics and Math (pgs. 43-63)	MI	SCI.5.P.FM.05.3 2	Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects. Describe how constant motion is the result of balanced (zero net) forces.
Physics and Math (pgs. 43-63)	MI	SCI.5.P.FM.05.3 3	Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects. Describe how changes in the motion of objects are caused by a non-zero net (unbalanced) force.

Physics and Math (pgs. 43-63)	MI	SCI.5.P.FM.05.3 4	Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects. Relate the size of change in motion to the strength of unbalanced forces and the mass of the object.
Rocket Activity (pgs. 69-75)	MI	SCI.5.P.FM.05.3 1	Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects. Describe what happens when two forces act on an object in the same or opposing directions.
Rocket Activity (pgs. 69-75)	MI	SCI.5.P.FM.05.3 3	Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects. Describe how changes in the motion of objects are caused by a non-zero net (unbalanced) force.
Rocket Activity (pgs. 69-75)	MI	SCI.5.P.FM.05.3 4	Develop an understanding that the position and/or motion of an object is relative to a point of reference. Understand forces affect the motion and speed of an object and that the net force on an object is the total of all of the forces acting on it. Understand the Earth pulls down on objects with a force called gravity. Develop an understanding that some forces are in direct contact with objects, while other forces are not in direct contact with objects. Relate the size of change in motion to the strength of unbalanced forces and the mass of the object.
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<b>Michigan Science</b>			

<b>Grade 6</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
History of Aviation Propulsion (pgs. 5-9)	MI	SCI.6.S.RS.06.1 9	Develop an understanding that claims and evidence for their scientific merit should be analyzed. Understand how scientists decide what constitutes scientific knowledge. Develop an understanding of the importance of reflection on scientific knowledge and its application to new situations to better understand the role of science in society and technology. Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.
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<b>2007 Science</b>			
<b>Grade Level and High School Content Expectations</b>			
<b>Michigan Science</b>			
<b>Grade 7</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
History of Aviation Propulsion (pgs. 5-9)	MI	SCI.7.S.RS.07.1 9	Develop an understanding that claims and evidence for their scientific merit should be analyzed. Understand how scientists decide what constitutes scientific knowledge. Develop an understanding of the importance of reflection on scientific knowledge and its application to new situations to better understand the role of science in society and technology. Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.