

Pushing the Envelope			
2008 Science			
Curriculum Standards			
Tennessee Science			
Grade 5			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	TN	SCI.5.GLE 0507.11.1	Design an investigation, collect data and draw conclusions about the relationship among mass, force, and distance traveled.
Rocket Activity (pgs. 69-75)	TN	SCI.5.GLE 0507.11.1	Design an investigation, collect data and draw conclusions about the relationship among mass, force, and distance traveled.
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2008 Science			
Curriculum Standards			
Tennessee Science			
Grade 7			
Activity/Lesson	State	Standards	
Types of Engines (pgs. 11-23)	TN	SCI.7.GLE 0707.11.3	Distinguish between speed and velocity.
Physics and Math (pgs. 43-63)	TN	SCI.7.GLE 0707.11.4	Investigate how Newton's laws of motion explain an object's movement.
Rocket Activity (pgs. 69-75)	TN	SCI.7.GLE 0707.11.2	Apply the equation for work in experiments with simple machines to determine the amount of force needed to do work.
Rocket Activity (pgs. 69-75)	TN	SCI.7.GLE 0707.11.4	Investigate how Newton's laws of motion explain an object's movement.
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2008 Science			
Curriculum Standards			
Tennessee Science			
Grade 8			
Activity/Lesson	State	Standards	
Chemistry (pgs. 25-41)	TN	SCI.8.GLE 0807.9.2	Explain that matter has properties that are determined by the structure and arrangement of its atoms.
Chemistry (pgs. 25-41)	TN	SCI.8.GLE 0807.9.4	Distinguish among elements, compounds, and mixtures.
Chemistry (pgs. 25-41)	TN	SCI.8.GLE 0807.9.8	Interpret the events represented by a chemical equation.
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Curriculum Standards			
Tennessee Science			
Grades 9-12 (Physical Science)			
Activity/Lesson	State	Standards	
History of Aviation Propulsion (pgs. 5-9)	TN	SCI.9-12.CLE 3202.3.1	Investigate the relationships among speed, position, time, velocity, and acceleration.
Types of Engines (pgs. 11-23)	TN	SCI.9-12.CLE 3202.3.1	Investigate the relationships among speed, position, time, velocity, and acceleration.

Types of Engines (pgs. 11-23)	TN	SCI.9-12.CLE 3202.4.1	Explore the difference between mass and weight.
Chemistry (pgs. 25-41)	TN	SCI.9-12.CLE 3202.1.1	Explore matter in terms of its physical and chemical properties.
Chemistry (pgs. 25-41)	TN	SCI.9-12.CLE 3202.1.7	Construct chemical formulas for common compounds.
Chemistry (pgs. 25-41)	TN	SCI.9-12.CLE 3202.1.8	Investigate relationships among the pressure, temperature, and volume of gases and liquids.
Physics and Math (pgs. 43-63)	TN	SCI.9-12.CLE 3202.3.2	Investigate and apply Newton's three laws of motion.
Rocket Activity (pgs. 69-75)	TN	SCI.9-12.CLE 3202.1.7	Construct chemical formulas for common compounds.
Rocket Activity (pgs. 69-75)	TN	SCI.9-12.CLE 3202.3.2	Investigate and apply Newton's three laws of motion.
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2008 Science			
Curriculum Standards			
Tennessee Science			
Grades 9-12 (Physics)			
Activity/Lesson	State	Standards	
Physics and Math (pgs. 43-63)	TN	SCI.9-12.CLE 3231.1.2	Analyze and apply Newton's three laws of motion.
Rocket Activity (pgs. 69-75)	TN	SCI.9-12.CLE 3231.1.2	Analyze and apply Newton's three laws of motion.