

<b>Future Flight Design</b>			
<b>2008 Science</b>			
<b>State Frameworks</b>			
<b>Mississippi Science</b>			
<b>Grade 5</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Air Transportation Problem	MS	SCI.5.1.c.2	Use precise measurement in conjunction with simple tools and technology to perform tests and collect data: Types of data (height, mass, volume, temperature, length, time, distance, volume, perimeter, area)
Air Transportation Problem	MS	SCI.5.1.e	Use drawings, tables, graphs, and written and oral language to describe objects and explain ideas and actions.
Aircraft Design Problem	MS	SCI.5.2.a	Determine how the properties of an object affect how it acts and interacts.
Aircraft Design Problem	MS	SCI.5.2.c.1	Investigate the motion of an object in terms of its position, direction of motion, and speed: The relative positions and movements of objects using points of reference (distance vs. time of moving objects)
Aircraft Design Problem	MS	SCI.5.2.c.2	Investigate the motion of an object in terms of its position, direction of motion, and speed: Force required to move an object using appropriate devices (e.g., spring scale)
Aircraft Design Problem	MS	SCI.5.2.c.4	Investigate the motion of an object in terms of its position, direction of motion, and speed: Effects of an unbalanced force on an object's motion in terms of speed and direction
<b>Future Flight Design</b>			
<b>2008 Science</b>			
<b>State Frameworks</b>			
<b>Mississippi Science</b>			
<b>Grade 6</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Air Transportation Problem	MS	SCI.6.1.c.2	Use simple tools and resources to gather and compare information (using standard, metric, and non-standard units of measurement): Types of data (e.g., linear measures, mass, volume, temperature, time, area, perimeter)
Air Transportation Problem	MS	SCI.6.1.d	Analyze data collected from a scientific investigation to construct explanations and draw conclusions.
Air Transportation Problem	MS	SCI.6.1.e	Communicate scientific procedures and conclusions using diagrams, charts, tables, graphs, maps, written explanations, and/or scientific models.

Aircraft Design Problem	MS	SCI.6.1.f	Evaluate the results or solutions to problems by considering how well a product or design met the challenge to solve a problem.
Aircraft Design Problem	MS	SCI.6.2.c.1	Investigate and describe the effects of forces acting on objects: Gravity, friction, magnetism, drag, lift, and thrust
Aircraft Design Problem	MS	SCI.6.2.c.2	Investigate and describe the effects of forces acting on objects: Forces affecting the motion of objects
Aircraft Design Problem	MS	SCI.6.2.f.2	Develop a logical argument to explain how the forces which affect the motion of objects has real-world applications including (but not limited to) examples of Mississippi's contributions as follows: Aerospace industry (The Raspet Flight Research Laboratory, housed at Mississippi State University, is one of the premier university flight research facilities in the country.)
<b>Future Flight Design</b>			
<b>2008 Science</b>			
<b>State Frameworks</b>			
<b>Mississippi Science</b>			
<b>Grade 7</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Air Transportation Problem	MS	SCI.7.1.c.2	Collect and display data using simple tools and resources to compare information (using standard, metric, and non-standard measurement): Types of data (e.g., linear measures, mass, volume, temperature, area, perimeter)
Air Transportation Problem	MS	SCI.7.1.d	Organize data in tables and graphs and analyze data to construct explanations and draw conclusions.
Air Transportation Problem	MS	SCI.7.1.e	Communicate results of scientific procedures and explanations through a variety of written and graphic methods.
Air Transportation Problem	MS	SCI.7.1.g	Develop a logical argument to explain why scientists often review and ask questions about the results of other scientists' work.
Aircraft Design Problem	MS	SCI.7.2.c	Compare the force (effort) required to do the same amount of work with and without simple machines (e.g., levers, pulleys, wheel and axle, inclined planes).
Aircraft Design Problem	MS	SCI.7.2.f.1	Describe the effects of unbalanced forces on the speed or direction of an object's motion: Variables that describe position, distance, displacement, speed, and change in speed of an object

Aircraft Design Problem	MS	SCI.7.2.f.2	Describe the effects of unbalanced forces on the speed or direction of an object's motion: Gravity, friction, drag, lift, electric forces, and magnetic forces
<b>Future Flight Design</b>			
<b>2008 Science</b>			
<b>State Frameworks</b>			
<b>Mississippi Science</b>			
<b>Grade 8</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Air Transportation Problem	MS	SCI.8.1.a	Design, conduct, and analyze conclusions from an investigation that includes using experimental controls.
Air Transportation Problem	MS	SCI.8.1.c.2	Summarize data to show the cause and effect relationship between qualitative and quantitative observations (using standard, metric, and non-standard units of measurement): Types of data (e.g., linear measures, mass, volume, temperature, area, perimeter)
Aircraft Design Problem	MS	SCI.8.1.f	Develop a logical argument to explain why perfectly designed solutions do not exist.
Aircraft Design Problem	MS	SCI.8.2.c	Distinguish the motion of an object by its position, direction of motion, speed, and acceleration and represent resulting data in graphic form in order to make a prediction.