Future Flight Design			
2006 Science			
Program of Studies			
Kentucky Science			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Air Transportation Problem	KY	SCI.5.SC-5-BC-U-4	scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis and doing experiments. The question being investigated determines the form of the investigation used.
Air Transportation Problem	KY	SCI.5.SC-5-I-S-3	explore the cause/effect relationship of altering a particular population of organisms within an ecosystem using data/evidence collected through research and/or simulations (e.g., role-play games, computer-based simulations)
Aircraft Design Problem	KY	SCI.5.SC-5-MF-S-2	create and interpret graphical representations in order to make inferences and draw conclusions about the motion of an object
Aircraft Design Problem	KY	SCI.5.SC-5-MF-S-4	predict and support with evidence/justification, changes in the motion of an object related to its mass or the amount of force acting on it
Future Flight Design			
2006 Science			
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Kentucky Science			
Grade 6			
Activity/Lesson	**State**	**Standards**	
Air Transportation Problem	KY	SCI.6.SC-6-EU-S-4	research how scientists organize data from complex systems and also how technology enables/enhances scientific research and data analysis
Air Transportation Problem	KY	SCI.6.SC-6-BC-U-3	scientists vary widely in what they study and how they do their work. While there is no fixed set of steps they follow, the basic process of science involves collecting relevant evidence, logical reasoning and the use of imaginative thinking in constructing explanations for what they observe.
Aircraft Design Problem	KY	SCI.6.SC-6-MF-U-2	when any force acts on an object, the change in speed or direction depends on the size and direction of the force.

Aircraft Design Problem	KY	SCI.6.SC-6-MF-S-2	use graphical and observational data to make inferences, predictions and draw conclusions about the motion of an object as related to the mass or force involved
Aircraft Design Problem	KY	SCI.6.SC-6-MF-S-4	represent the motion of objects and their response to unbalanced forces in a variety of ways
Aircraft Design Problem	KY	SCI.6.SC-6-EU-S-4	research how scientists organize data from complex systems and also how technology enables/enhances scientific research and data analysis
Future Flight Design			
2006 Science			
Program of Studies			
Kentucky Science			
Grade 7			
Activity/Lesson	**State**	**Standards**	
Air Transportation Problem	KY	SCI.7.SC-7-MF-U-4	technology used to gather data enhances accuracy and allows scientists to analyze and quantify results of investigations.
Aircraft Design Problem	KY	SCI.7.SC-7-MF-U-2	forces acting against each other can be balanced, canceling each other out and having no net effect.
Aircraft Design Problem	KY	SCI.7.SC-7-MF-S-3	investigate balanced and unbalanced forces and their effect on objects and their motion
Aircraft Design Problem	KY	SCI.7.SC-7-I-U-3	not all actions/decisions have the possibility of a desirable outcome. Sometimes a compromise requires accepting one unwanted outcome to avoid a different unwanted outcome.
Future Flight Design			
2006 Science			
Program of Studies			
Kentucky Science			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Aircraft Design Problem	KY	SCI.8.SC-8-MF-S-3	investigate motion of objects to generate and experimentally test predictions/conclusions. Compare and critique the results of others for accuracy, identifying strengths and weaknesses in the experiment, insisting on the use of evidence to support decisions

Aircraft Design Problem	KY	SCI.8.SC-8-I-S-4	evaluate the risks and benefits of human actions affecting the environment and identify which populations will be harmed or helped. Use a variety of data/ sources to support or defend a position related to a proposed action, both orally and in writing. Analyze the validity of other arguments