Future Flight Design			
2007 Science and Technology			
Learning Results: Parameters for Essential Instruction			
Maine Science and Technology			
Grades 3-5			
Activity/Lesson	**State**	**Standards**	
Air Transportation Problem	ME	SCT.3-5.B2.e	Evaluate their own design results, as well as those of others, using established criteria.
Air Transportation Problem	ME	SCT.3-5.B2.g	Present the design problem, process, and design or solution using oral, written, and/or pictorial means of communication.
Aircraft Design Problem	ME	SCT.3-5.A1.a	Give examples that show how individual parts of organisms, ecosystems, or man-made structures can influence one another.
Aircraft Design Problem	ME	SCT.3-5.B2.a	Identify and explain a simple design problem and a solution related to the problem.
Aircraft Design Problem	ME	SCT.3-5.B2.c	Use appropriate tools, materials, safe techniques, and quantitative measurements to implement a proposed solution to a design problem.
Aircraft Design Problem	ME	SCT.3-5.B2.e	Evaluate their own design results, as well as those of others, using established criteria.
Aircraft Design Problem	ME	SCT.3-5.B2.f	Modify designs based on results of evaluations.
Aircraft Design Problem	ME	SCT.3-5.D4.a	Predict the effect of a given force on the motion of an object.
Future Flight Design			
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Learning Results: Parameters for Essential Instruction			
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Grades 6-8			
Activity/Lesson	**State**	**Standards**	
Air Transportation Problem	ME	SCT.6-8.B1.d	Use mathematics to gather, organize, and present data and structure convincing explanations.
Air Transportation Problem	ME	SCT.6-8.B1.f	Communicate, critique, and analyze their own scientific work and the work of other students.
Aircraft Design Problem	ME	SCT.6-8.B2.b	Design a solution or product.
Aircraft Design Problem	ME	SCT.6-8.B2.d	Implement a proposed design.
Aircraft Design Problem	ME	SCT.6-8.B2.e	Evaluate a completed design or product.
Aircraft Design Problem	ME	SCT.6-8.B2.f	Suggest improvements for their own and others' designs and try out proposed modifications.

Aircraft Design Problem	ME	SCT.6-8.B2.g	Explain the design process including the stages of problem identification, solution design, implementation, and evaluation.
Aircraft Design Problem	ME	SCT.6-8.C2.a	Compare the process of scientific inquiry to the process of technological design.
Aircraft Design Problem	ME	SCT.6-8.D4.e	Describe and apply an understanding of the effects of multiple forces on an object, and how unbalanced forces will cause changes in the speed or direction.