Learning to Fly: The Wright Brother's Adventure			
2004 Science			
Standard Course of Study			
North Carolina Science			
Grade 6			
Activity/Lesson	**State**	**Standards**	
The Society	NC	SCI.6.1.01	Identify and create questions and hypotheses that can be answered through scientific investigations.
The Society	NC	SCI.6.1.02.a	Develop appropriate experimental procedures for: Given questions.
The Society	NC	SCI.6.1.02.b	Develop appropriate experimental procedures for: Student generated questions.
The Society	NC	SCI.6.1.09.a	Use technologies and information systems to: Research.
The Society	NC	SCI.6.5.04.c	Describe space explorations and the understandings gained from them including: Historic timeline.
The Society	NC	SCI.6.5.06.e	Analyze the spin-off benefits generated by space exploration technology including: Future research.
Learning to Fly: The Wright Brother's Adventure			
2004 Science			
Standard Course of Study			
North Carolina Science			
Grade 7			
Activity/Lesson	**State**	**Standards**	
The Society	NC	SCI.7.1.01	Identify and create questions and hypotheses that can be answered through scientific investigations.
Wright Brothers: 1900 Glider	NC	SCI.7.2.03.a	Evaluate technological designs for: Application of scientific principles.
Wright Brothers: 1900 Glider	NC	SCI.7.2.03.d	Evaluate technological designs for: Consistent testing protocols.
1901: The First Improvement	NC	SCI.7.1.06.d	Use mathematics to gather, organize, and present quantitative data resulting from scientific investigations: Prediction models.
1901: The First Improvement	NC	SCI.7.1.09.a	Use technologies and information systems to: Research.
1903: Powered Flight	NC	SCI.7.1.06.d	Use mathematics to gather, organize, and present quantitative data resulting from scientific investigations: Prediction models.
1903: Powered Flight	NC	SCI.7.2.03.c	Evaluate technological designs for: Constraints of design.
Learning to Fly: The Wright Brother's Adventure			
2004 Science			
Standard Course of Study			
North Carolina Science			
Grade 8			

Activity/Lesson	State	Standards	
The Society	NC	SCI.8.1.01	Identify and create questions and hypotheses that can be answered through scientific investigations.
Wright Brothers: 1900 Glider	NC	SCI.8.1.03.b	Apply safety procedures in the laboratory and in field studies: Safely manipulate materials and equipment.
Wright Brothers: 1900 Glider	NC	SCI.8.2.03.a	Evaluate technological designs for: Application of scientific principles.
Wright Brothers: 1900 Glider	NC	SCI.8.2.03.d	Evaluate technological designs for: Consistent testing protocols.
1901: The First Improvement	NC	SCI.8.1.04.e	Analyze variables in scientific investigations: Define operationally.
1901: The First Improvement	NC	SCI.8.1.09.a	Use technologies and information systems to: Research.
1902: Success at Last	NC	SCI.8.1.06.d	Use mathematics to gather, organize, and present quantitative data resulting from scientific investigations: Prediction models.
1903: Powered Flight	NC	SCI.8.1.06.a	Use mathematics to gather, organize, and present quantitative data resulting from scientific investigations: Measurement.
1903: Powered Flight	NC	SCI.8.2.03.a	Evaluate technological designs for: Application of scientific principles.
1903: Powered Flight	NC	SCI.8.2.03.c	Evaluate technological designs for: Constraints of design.
1903: Powered Flight	NC	SCI.8.2.03.d	Evaluate technological designs for: Consistent testing protocols.
1904: Improvement in Dayton	NC	SCI.8.1.08.a	Use oral and written language to: Communicate findings.
1904: Improvement in Dayton	NC	SCI.8.1.09.d	Use technologies and information systems to: Disseminate findings to others.
1905: Complete a Flight at Last	NC	SCI.8.2.03.a	Evaluate technological designs for: Application of scientific principles.
Learning to Fly: The Wright Brother's Adventure			
2004 Science			
Standard Course of Study			
North Carolina Science			
Grades 9-12 (Physical Science)			
Activity/Lesson	**State**	**Standards**	
Wright Brothers: 1900 Glider	NC	SCI.9-12.PS.1.04.b	Safely manipulate materials and equipment needed for scientific investigations.
1901: The First Improvement	NC	SCI.9-12.PS.1.05.b	Analyze reports of scientific investigations from an informed scientifically literate viewpoint including considerations of: Adequacy of experimental controls.
1901: The First Improvement	NC	SCI.9-12.PS.2.02.a	In the absence of a force, an object in motion will remain in motion or an object at rest will remain at rest until acted on by an unbalanced force.

1901: The First Improvement	NC	SCI.9-12.PS.2.02.b	Change in motion of an object (acceleration) is directly proportional to the unbalanced outside force and inversely proportional to the mass.
1903: Powered Flight	NC	SCI.9-12.PS.1.02.d	Select and use appropriate measurement tools.
1903: Powered Flight	NC	SCI.9-12.PS.1.02.f	Design and conduct scientific investigations to answer questions about the physical world. Organize data into charts and graphs.
1904: Improvement in Dayton	NC	SCI.9-12.PS.1.02.h	Design and conduct scientific investigations to answer questions about the physical world. Communicate findings.
Learning to Fly: The Wright Brother's Adventure			
2004 Science			
Standard Course of Study			
North Carolina Science			
Grades 9-12 (Physics)			
Activity/Lesson	**State**	**Standards**	
The Society	NC	SCI.9-12.PH.1.01	Identify questions and problems that can be answered through scientific investigations.
Wright Brothers: 1900 Glider	NC	SCI.9-12.PH.1.04.b	Safely manipulate materials and equipment needed for scientific investigations.
1901: The First Improvement	NC	SCI.9-12.PH.1.02.b	Design and conduct scientific investigations to answer questions about the physical world. Identify variables.
1901: The First Improvement	NC	SCI.9-12.PH.1.02.c	Design and conduct scientific investigations to answer questions about the physical world. Use a control or comparison group when appropriate.
1901: The First Improvement	NC	SCI.9-12.PH.1.05.a	Design and conduct scientific investigations to answer questions about the physical world. Adequacy of experimental controls.
1901: The First Improvement	NC	SCI.9-12.PH.2.04.e	Using graphical and mathematical tools, design and conduct investigations of linear motion and the relationships among: Time.
1901: The First Improvement	NC	SCI.9-12.PH.4.01	Determine that an object will continue in its state of motion unless acted upon by a net outside force (Newton's First Law of Motion, The Law of Inertia).
1901: The First Improvement	NC	SCI.9-12.PH.4.05	Assess the independence of the vector components of forces.

New Data	NC	SCI.9-12.PH.1.05.a	Design and conduct scientific investigations to answer questions about the physical world.Adequacy of experimental controls.
1903: Powered Flight	NC	SCI.9-12.PH.1.02.f	Design and conduct scientific investigations to answer questions about the physical world. Organize data into charts and graphs.
1904: Improvement in Dayton	NC	SCI.9-12.PH.1.02.h	Design and conduct scientific investigations to answer questions about the physical world. Communicate findings.
1904: Improvement in Dayton	NC	SCI.9-12.PH.2.04.e	Using graphical and mathematical tools, design and conduct investigations of linear motion and the relationships among:Time.