

<b>Learning to Fly: The Wright Brother's Adventure</b>			
<b>2006 Science</b>			
<b>Content Standards</b>			
<b>Montana Science</b>			
<b>Grades 5-8</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
The Society	MT	SCI.5-8.1.1	identify a question, determine relevant variables and a control, formulate a testable hypothesis, plan and predict the outcome of an investigation, safely conduct scientific investigation, and compare and analyze data
The Society	MT	SCI.5-8.5.3	simulate collaborative problem solving and give examples of how scientific knowledge and technology are shared with other scientists and the public
Wright Brothers: 1901 Glider	MT	SCI.5-8.1.1	identify a question, determine relevant variables and a control, formulate a testable hypothesis, plan and predict the outcome of an investigation, safely conduct scientific investigation, and compare and analyze data
1901: The First Improvement	MT	SCI.5-8.2.5	describe and explain the motion of an object in terms of its position, direction, and speed as well as the forces acting upon it
1901: The First Improvement	MT	SCI.5-8.2.6	identify, build, describe, measure, and analyze mechanical systems (e.g., simple and complex compound machines) and describe the forces acting within those systems
New Data	MT	SCI.5-8.1.3	review, communicate and defend results of investigations, including considering alternative explanations
New Data	MT	SCI.5-8.1.4	create models to illustrate scientific concepts and use the model to predict change. (e.g., computer simulation, stream table, graphic representation)
1903: Powered Flight	MT	SCI.5-8.1.4	create models to illustrate scientific concepts and use the model to predict change. (e.g., computer simulation, stream table, graphic representation)
1903: Powered Flight	MT	SCI.5-8.1.5	identify strengths and weakness in an investigation design
1904: Improvement in Dayton	MT	SCI.5-8.2.4	model and explain the states of matter are dependent upon the quantity of energy present in the system and describe what will change and what will remain unchanged at the particulate level when matter experiences an external force or energy change

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<b>2006 Science</b>			
<b>Content Standards</b>			
<b>Montana Science</b>			
<b>Grades 9-12</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Wright Brothers: 1900 Glider	MT	SCI.9-12.1.1	generate a question, identify dependent and independent variables, formulate testable, multiple hypotheses, plan an investigation, predict its outcome, safely conduct the scientific investigations, and collect and analyze data
Meet the Wrights	MT	SCI.9-12.6.1	analyze and illustrate the historical impact of scientific and technological advances, including Montana American Indian examples
1901: The First Improvement	MT	SCI.9-12.1.4	analyze observations and explain with scientific understanding to develop a plausible model (e.g., atom, expanding universe)
New Data	MT	SCI.9-12.1.3	review evidence, communicate and defend results, and recognize that the results of a scientific investigation are always open to revision by further investigations. (e.g., through graphical representation or charts)
1902: Success at Last	MT	SCI.9-12.1.4	analyze observations and explain with scientific understanding to develop a plausible model (e.g., atom, expanding universe)
1903: Powered Flight	MT	SCI.9-12.1.2	select and use appropriate tools including technology to make measurements (in metric units), gather, process and analyze data from scientific investigations using appropriate mathematical analysis, error analysis, and graphical representation
1903: Powered Flight	MT	SCI.9-12.1.5	identify strengths, weaknesses, and assess the validity of the experimental design of an investigation through analysis and evaluation
1905: Complete a Flight at Last	MT	SCI.9-12.5.1	predict how key factors (e.g., technology, competitiveness, and world events) affect the development and acceptance of scientific thought