

| Learning to Fly: The Wright Brother's Adventure | | | |
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| 2008 Science | | | |
| Next Generation Sunshine State Standards | | | |
| Florida Science | | | |
| Grade 6 | | | |
| Activity/Lesson | State | Standards | |
| The Society | FL | SCI.6.SC.6.N.1 .A | Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation. |
| The Society | FL | SCI.6.SC.6.N.1 .D | Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations. |
| The Society | FL | SCI.6.SC.6.N.2 .3 | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| Meet the Wrights | FL | SCI.6.SC.6.N.2 .3 | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| 1901: The First Improvement | FL | SCI.6.SC.6.N.1 .1 | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| 1901: The First Improvement | FL | SCI.6.SC.6.N.2 .3 | Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals. |
| 1901: The First Improvement | FL | SCI.6.SC.6.N.3 .4 | Identify the role of models in the context of the sixth grade science benchmarks. |
| 1901: The First Improvement | FL | SCI.6.SC.6.P.1 2.B | The motion of objects can be changed by forces. |
| 1901: The First Improvement | FL | SCI.6.SC.6.P.1 3.B | Energy change is understood in terms of forces--pushes or pulls. |
| 1901: The First Improvement | FL | SCI.6.SC.6.P.1 3.C | Some forces act through physical contact, while others act at a distance. |

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| 1901: The First Improvement | FL | SCI.6.SC.6.P.1 3.1 | Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational. |
| 1901: The First Improvement | FL | SCI.6.SC.6.P.1 3.3 | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |
| New Data | FL | SCI.6.SC.6.N.1 .3 | Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each. |
| New Data | FL | SCI.6.SC.6.N.1 .4 | Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation. |
| 1902: Success at Last | FL | SCI.6.SC.6.N.3 .4 | Identify the role of models in the context of the sixth grade science benchmarks. |
| 1903: Powered Flight | FL | SCI.6.SC.6.N.1 .1 | Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| 1903: Powered Flight | FL | SCI.6.SC.6.N.3 .4 | Identify the role of models in the context of the sixth grade science benchmarks. |
| 1903: Powered Flight | FL | SCI.6.SC.6.P.1 3.3 | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |
| 1904: Improvement in Dayton | FL | SCI.6.SC.6.N.1 .A | Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation. |
| 1904: Improvement in Dayton | FL | SCI.6.SC.6.P.1 2.B | The motion of objects can be changed by forces. |
| 1904: Improvement in Dayton | FL | SCI.6.SC.6.P.1 3.B | Energy change is understood in terms of forces--pushes or pulls. |
| 1904: Improvement in Dayton | FL | SCI.6.SC.6.P.1 3.C | Some forces act through physical contact, while others act at a distance. |
| 1904: Improvement in Dayton | FL | SCI.6.SC.6.P.1 3.1 | Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational. |

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| 1904: Improvement in Dayton | FL | SCI.6.SC.6.P.1 3.3 | Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both. |
| Learning to Fly: The Wright Brother's Adventure | | | |
| 2008 Science | | | |
| Next Generation Sunshine State Standards | | | |
| Florida Science | | | |
| Grade 7 | | | |
| Activity/Lesson | State | Standards | |
| The Society | FL | SCI.7.SC.7.N.1 .A | Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation. |
| The Society | FL | SCI.7.SC.7.N.1 .D | Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations. |
| The Society | FL | SCI.7.SC.7.N.2 .1 | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. |
| 1901: The First Improvement | FL | SCI.7.SC.7.N.1 .1 | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| 1901: The First Improvement | FL | SCI.7.SC.7.N.1 .3 | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| 1901: The First Improvement | FL | SCI.7.SC.7.N.1 .4 | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| 1901: The First Improvement | FL | SCI.7.SC.7.N.3 .2 | Identify the benefits and limitations of the use of scientific models. |

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| New Data | FL | SCI.7.SC.7.N.1 .1 | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| New Data | FL | SCI.7.SC.7.N.1 .3 | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. |
| New Data | FL | SCI.7.SC.7.N.1 .4 | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. |
| 1902: Success at Last | FL | SCI.7.SC.7.N.3 .2 | Identify the benefits and limitations of the use of scientific models. |
| 1903: Powered Flight | FL | SCI.7.SC.7.N.1 .1 | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| 1903: Powered Flight | FL | SCI.7.SC.7.N.3 .2 | Identify the benefits and limitations of the use of scientific models. |
| 1904: Improvement in Dayton | FL | SCI.7.SC.7.N.1 .A | Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation. |
| Learning to Fly: The Wright Brother's Adventure | | | |
| 2008 Science | | | |
| Next Generation Sunshine State Standards | | | |
| Florida Science | | | |
| Grade 8 | | | |
| Activity/Lesson | State | Standards | |

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| The Society | FL | SCI.8.SC.8.N.1 .A | Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation. |
| The Society | FL | SCI.8.SC.8.N.1 .D | Scientific knowledge is based on observation and inference; it is important to recognize that these are very different things. Not only does science require creativity in its methods and processes, but also in its questions and explanations. |
| 1901: The First Improvement | FL | SCI.8.SC.8.N.1 .1 | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| 1901: The First Improvement | FL | SCI.8.SC.8.N.1 .6 | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence. |
| 1901: The First Improvement | FL | SCI.8.SC.8.N.3 .1 | Select models useful in relating the results of their own investigations. |
| New Data | FL | SCI.8.SC.8.N.1 .1 | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| New Data | FL | SCI.8.SC.8.N.1 .3 | Use phrases such as "results support" or "fail to support" in science, understanding that science does not offer conclusive 'proof' of a knowledge claim. |
| New Data | FL | SCI.8.SC.8.N.3 .1 | Select models useful in relating the results of their own investigations. |

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| 1902: Success at Last | FL | SCI.8.SC.8.N.1 .6 | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence. |
| 1902: Success at Last | FL | SCI.8.SC.8.N.3 .1 | Select models useful in relating the results of their own investigations. |
| 1903: Powered Flight | FL | SCI.8.SC.8.N.1 .1 | Define a problem from the eighth grade curriculum using appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. |
| 1903: Powered Flight | FL | SCI.8.SC.8.N.1 .6 | Understand that scientific investigations involve the collection of relevant empirical evidence, the use of logical reasoning, and the application of imagination in devising hypotheses, predictions, explanations and models to make sense of the collected evidence. |
| 1903: Powered Flight | FL | SCI.8.SC.8.N.3 .1 | Select models useful in relating the results of their own investigations. |
| 1904: Improvement in Dayton | FL | SCI.8.SC.8.N.1 .A | Scientific inquiry is a multifaceted activity; The processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation. |
| 1904: Improvement in Dayton | FL | SCI.8.SC.8.E.5 .10 | Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information. |
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| 2008 Science | | | |
| Next Generation Sunshine State Standards | | | |
| Florida Science | | | |
| Grades 9-12 (Physical Science Body of Knowledge) | | | |
| Activity/Lesson | State | Standards | |

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| 1901: The First Improvement | FL | SCI.9-12.SC.912.P.1 2.A | Motion can be measured and described qualitatively and quantitatively. Net forces create a change in motion. When objects travel at speeds comparable to the speed of light, Einstein's special theory of relativity applies. |
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