

Exploring Aeronautics			
1998 Science			
Academic Standards			
Nebraska Science			
Grades 5-8			
Activity/Lesson	State	Standards	
Fundamentals of Aeronautics (145-176)	NE	SCI.5-8.8.1.2.A	Collect, manipulate, and analyze data from an experiment.
Fundamentals of Aeronautics (145-176)	NE	SCI.5-8.8.1.2.C	Interpret and explain results of experimentation.
Fundamentals of Aeronautics (145-176)	NE	SCI.5-8.8.3.2.A	Investigate and describe the motion of an object by its position, direction of motion, and speed.
Fundamentals of Aeronautics (145-176)	NE	SCI.5-8.8.3.2.B	Investigate and demonstrate that the speed and/or direction of an object changes when a force is applied to that object.
Wings(177-208)	NE	SCI.5-8.8.6.2.A	Distinguish between scientific inquiry (asking questions about the natural world) and technological design (using science to solve practical problems).
Wings(177-208)	NE	SCI.5-8.8.6.2.C	Assess the avoidable and unavoidable limits of a technological design.
Wings(177-208)	NE	SCI.5-8.8.8.1.A	Investigate and understand that women and men of various social and ethnic backgrounds, working alone or in teams, engage in the activities of science, engineering, and related fields.
Wings(177-208)	NE	SCI.5-8.8.8.2.C	Evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists.
Airplane Control(209-256)	NE	SCI.5-8.8.3.2.A	Investigate and describe the motion of an object by its position, direction of motion, and speed.
Airplane Control(209-256)	NE	SCI.5-8.8.3.2.B	Investigate and demonstrate that the speed and/or direction of an object changes when a force is applied to that object.
Airplane Control(209-256)	NE	SCI.5-8.8.6.2.A	Distinguish between scientific inquiry (asking questions about the natural world) and technological design (using science to solve practical problems).
Tools of Aeronautics(257-326)	NE	SCI.5-8.8.6.2.A	Distinguish between scientific inquiry (asking questions about the natural world) and technological design (using science to solve practical problems).
Tools of Aeronautics(257-326)	NE	SCI.5-8.8.6.2.C	Assess the avoidable and unavoidable limits of a technological design.
Tools of Aeronautics(257-326)	NE	SCI.5-8.8.8.2.A	Formulate and test a hypothesis using observations, experiments, and models.

Tools of Aeronautics(257-326)	NE	SCI.5-8.8.8.2.C	Evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists.
How an Airplane Flies	NE	SCI.5-8.8.3.2.B	Investigate and demonstrate that the speed and/or direction of an object changes when a force is applied to that object.
The Tools of Aeronautics	NE	SCI.5-8.8.1.2.B	Observe and develop models (e.g., physical, mathematical, mental, and computer simulations).
The Activity Center	NE	SCI.5-8.8.3.2.B	Investigate and demonstrate that the speed and/or direction of an object changes when a force is applied to that object.
The Activity Center	NE	SCI.5-8.8.6.2.A	Distinguish between scientific inquiry (asking questions about the natural world) and technological design (using science to solve practical problems).
The Activity Center	NE	SCI.5-8.8.6.2.C	Assess the avoidable and unavoidable limits of a technological design.
The Resource Center	NE	SCI.5-8.8.8.1.A	Investigate and understand that women and men of various social and ethnic backgrounds, working alone or in teams, engage in the activities of science, engineering, and related fields.
The Resource Center	NE	SCI.5-8.8.8.1.C	Explain the need for ethical codes followed by scientists (e.g., humane treatment of animals and truth in reporting).
The Resource Center	NE	SCI.5-8.8.8.2.C	Evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists.
Science of Flight	NE	SCI.5-8.8.1.2.C	Interpret and explain results of experimentation.
Science of Flight	NE	SCI.5-8.8.1.2.D	Analyze whether or not investigative procedures and conclusions are reasonable.
Science of Flight	NE	SCI.5-8.8.2.1.C	Use appropriate tools and techniques to gather, analyze, and interpret data.
Science of Flight	NE	SCI.5-8.8.3.2.B	Investigate and demonstrate that the speed and/or direction of an object changes when a force is applied to that object.
Science of Flight	NE	SCI.5-8.8.3.3.D	Investigate and describe the properties and transfer of sound energy.
Science of Flight	NE	SCI.5-8.8.6.2.A	Distinguish between scientific inquiry (asking questions about the natural world) and technological design (using science to solve practical problems).
Science of Flight	NE	SCI.5-8.8.6.2.C	Assess the avoidable and unavoidable limits of a technological design.
Intro to Aeronautics (109-123)	NE	SCI.5-8.8.2.1.C	Use appropriate tools and techniques to gather, analyze, and interpret data.
Intro to Aeronautics (109-123)	NE	SCI.5-8.8.3.2.A	Investigate and describe the motion of an object by its position, direction of motion, and speed.

Intro to Aeronautics (109-123)	NE	SCI.5-8.8.3.2.B	Investigate and demonstrate that the speed and/or direction of an object changes when a force is applied to that object.
Intro to Aeronautics (109-123)	NE	SCI.5-8.8.6.2.C	Assess the avoidable and unavoidable limits of a technological design.
Intro to Aeronautics (109-123)	NE	SCI.5-8.8.8.2.A	Formulate and test a hypothesis using observations, experiments, and models.
Intro to Aeronautics (109-123)	NE	SCI.5-8.8.8.2.C	Evaluate the results of scientific investigations, experiments, observations, theoretical models, and the explanations proposed by other scientists.
Scientific Method(124-144)	NE	SCI.5-8.8.1.2.A	Collect, manipulate, and analyze data from an experiment.
Scientific Method(124-144)	NE	SCI.5-8.8.1.2.C	Interpret and explain results of experimentation.
Scientific Method(124-144)	NE	SCI.5-8.8.1.2.D	Analyze whether or not investigative procedures and conclusions are reasonable.
Scientific Method(124-144)	NE	SCI.5-8.8.2.1.A	Identify questions and form hypotheses that can be examined through scientific investigations.
Scientific Method(124-144)	NE	SCI.5-8.8.2.1.B	Design and conduct a scientific investigation.
Scientific Method(124-144)	NE	SCI.5-8.8.2.1.C	Use appropriate tools and techniques to gather, analyze, and interpret data.