

Courage to Soar			
2004 Science			
Grade Level Articulations			
Arizona Science			
Grade 3			
Activity/Lesson	State	Standards	
Kite Flight	AZ	SCI.3.1.1.PO 2	Predict the results of an investigation based on observed patterns, not random guessing.
Kite Flight	AZ	SCI.3.1.3.PO 4	Generate questions for possible future investigations based on the conclusions of the investigation.
Kite Flight	AZ	SCI.3.1.3.PO 5	Record questions for further inquiry based on the conclusions of the investigation.
Soaring Higher	AZ	SCI.3.3.2.PO 2	Describe the development of different technologies (e.g., communication, entertainment, transportation, medicine) in response to resources, needs, and values.
Aviation Pioneers	AZ	SCI.3.2.1.PO 1	Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations (e.g., John Muir [naturalist], supports Strand 4; Thomas Edison [inventor], supports Strand 5; Mae Jemison [engineer, physician, astronaut], supports Strand 6; Edmund Halley [scientist], supports Strand 6).
Aviation Pioneers	AZ	SCI.3.3.2.PO 2	Describe the development of different technologies (e.g., communication, entertainment, transportation, medicine) in response to resources, needs, and values.
Having the Right Stuff	AZ	SCI.3.2.1.PO 1	Identify how diverse people and/or cultures, past and present, have made important contributions to scientific innovations (e.g., John Muir [naturalist], supports Strand 4; Thomas Edison [inventor], supports Strand 5; Mae Jemison [engineer, physician, astronaut], supports Strand 6; Edmund Halley [scientist], supports Strand 6).
Flying a Styrofoam Plane	AZ	SCI.3.1.4.PO 2	Describe an investigation in ways that enable others to repeat it.
Looking for Answers:A research project	AZ	SCI.3.1.3.PO 2	Construct reasonable interpretations of the collected data based on formulated questions.
Looking for Answers:A research project	AZ	SCI.3.1.4.PO 1	Communicate investigations and explanations using evidence and appropriate terminology.
The Matter of Air	AZ	SCI.3.1.1.PO 2	Predict the results of an investigation based on observed patterns, not random guessing.

The Matter of Air	AZ	SCI.3.1.3.PO 3	Compare the results of the investigation to predictions made prior to the investigation.
The Four Forces of Flight	AZ	SCI.3.1.1.PO 2	Predict the results of an investigation based on observed patterns, not random guessing.
The Four Forces of Flight	AZ	SCI.3.1.4.PO 2	Describe an investigation in ways that enable others to repeat it.
Controlling the Plane	AZ	SCI.3.1.1.PO 2	Predict the results of an investigation based on observed patterns, not random guessing.
Controlling the Plane	AZ	SCI.3.1.3.PO 1.a	Organize data using the following methods with appropriate labels (bar graphs)
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2004 Science			
Grade Level Articulations			
Arizona Science			
Grade 4			
Activity/Lesson	State	Standards	
Kite Flight	AZ	SCI.4.1.1.PO 2	Formulate a relevant question through observations that can be tested by an investigation.
Kite Flight	AZ	SCI.4.1.1.PO 3	Formulate predictions in the realm of science based on observed cause and effect relationships.
Soaring Higher	AZ	SCI.4.1.4.PO 2.b	Choose an appropriate graphic representation for collected data (line graph)
Aviation Pioneers	AZ	SCI.4.1.2.PO 2	Plan a simple investigation that identifies the variables to be controlled.
Aviation Pioneers	AZ	SCI.4.2.2.PO 1	Explain the role of experimentation in scientific inquiry.
Aviation Pioneers	AZ	SCI.4.2.2.PO 3	Explain various ways scientists generate ideas (e.g., observation, experiment, collaboration, theoretical and mathematical models).
Having the Right Stuff	AZ	SCI.4.1.4.PO 2.c	Choose an appropriate graphic representation for collected data (Venn diagram)
Flying a Styrofoam Plane	AZ	SCI.4.2.2.PO 1	Explain the role of experimentation in scientific inquiry.
Flying a Styrofoam Plane	AZ	SCI.4.2.2.PO 3	Explain various ways scientists generate ideas (e.g., observation, experiment, collaboration, theoretical and mathematical models).
Looking for Answers:A research project	AZ	SCI.4.1.1.PO 4	Locate information (e.g., book, article, website) related to an investigation.
Looking for Answers:A research project	AZ	SCI.4.1.3.PO 5	Develop new questions and predictions based upon the data collected in the investigation.

The Matter of Air	AZ	SCI.4.1.1.PO 3	Formulate predictions in the realm of science based on observed cause and effect relationships.
The Matter of Air	AZ	SCI.4.1.3.PO 4	Determine whether the data supports the prediction for an investigation.
The Matter of Air	AZ	SCI.4.2.2.PO 3	Explain various ways scientists generate ideas (e.g., observation, experiment, collaboration, theoretical and mathematical models).
The Four Forces of Flight	AZ	SCI.4.2.2.PO 1	Explain the role of experimentation in scientific inquiry.
Controlling the Plane	AZ	SCI.4.1.1.PO 3	Formulate predictions in the realm of science based on observed cause and effect relationships.
Controlling the Plane	AZ	SCI.4.1.3.PO 5	Develop new questions and predictions based upon the data collected in the investigation.
Courage to Soar			
2004 Science			
Grade Level Articulations			
Arizona Science			
Grade 5			
Activity/Lesson	State	Standards	
Kite Flight	AZ	SCI.5.1.1.PO 1	Formulate a relevant question through observations that can be tested by an investigation.
Kite Flight	AZ	SCI.5.1.1.PO 2	Formulate predictions in the realm of science based on observed cause and effect relationships.
Soaring Higher	AZ	SCI.5.1.4.PO 2.b	Choose an appropriate graphic representation for collected data (line graph)
Soaring Higher	AZ	SCI.5.3.2.PO 1	Describe the relationship between science and technology.
Aviation Pioneers	AZ	SCI.5.2.2.PO 1	Provide examples that support the premise that science is an ongoing process that changes in response to new information and discoveries (e.g., space exploration, medical advances).
Aviation Pioneers	AZ	SCI.5.3.2.PO 1	Describe the relationship between science and technology.
Having the Right Stuff	AZ	SCI.5.1.4.PO 2.c	Choose an appropriate graphic representation for collected data (Venn diagram)
Having the Right Stuff	AZ	SCI.5.2.2.PO 5	Describe qualities of the scientists' habits of mind (e.g., openness, skepticism, integrity, tolerance).
Looking for Answers:A research project	AZ	SCI.5.1.1.PO 3	Locate information (e.g., book, article, website) related to an investigation.

Looking for Answers:A research project	AZ	SCI.5.1.4.PO 1	Communicate verbally or in writing the results of an inquiry.
The Matter of Air	AZ	SCI.5.1.1.PO 2	Formulate predictions in the realm of science based on observed cause and effect relationships.
The Matter of Air	AZ	SCI.5.1.3.PO 4	Develop new investigations and predictions based on questions that arise from the findings of an investigation.
The Four Forces of Flight	AZ	SCI.5.5.2.PO 1.a	Describe the following forces (gravity)
The Four Forces of Flight	AZ	SCI.5.5.2.PO 1.b	Describe the following forces (friction)
The Four Forces of Flight	AZ	SCI.5.5.2.PO 2	Describe the various effects forces can have on an object (e.g., cause motion, halt motion, change direction of motion, cause deformation).
Controlling the Plane	AZ	SCI.5.1.1.PO 2	Formulate predictions in the realm of science based on observed cause and effect relationships.
Controlling the Plane	AZ	SCI.5.1.3.PO 4	Develop new investigations and predictions based on questions that arise from the findings of an investigation.
Controlling the Plane	AZ	SCI.5.1.4.PO 2.a	Choose an appropriate graphic representation for collected data (bar graph)