| Courage to Soar | | | |
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| 2005 Science | | | |
| Curriculum Framework | | | |
| **Arkansas Science** | | | |
| **Grade 3** | | | |
| **Activity/Lesson** | **State** | **Standards** | |
| Kite Flight | AR | SCI.3.NS.1.3.2 | Develop questions that guide scientific inquiry |
| Kite Flight | AR | SCI.3.NS.1.3.8 | Use simple equipment, age appropriate tools, technology, and mathematics in scientific investigations (e.g., balances, hand lenses, microscopes, rulers, thermometers, calculators, computers) |
| Aviation Pioneers | AR | SCI.3.NS.1.3.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| Having the Right Stuff | AR | SCI.3.NS.1.3.1.c | Communicate observations orally, in writing, and in graphic organizers (Venn diagrams) |
| Flying a Styrofoam Plane | AR | SCI.3.NS.1.3.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| Looking for Answers:A research project | AR | SCI.3.NS.1.3.6 | Collect and analyze measurable empirical evidence as a team and/or as individuals |
| The Matter of Air | AR | SCI.3.NS.1.3.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| The Matter of Air | AR | SCI.3.NS.1.3.7 | Make and explain predictions based on prior knowledge |
| The Four Forces of Flight | AR | SCI.3.NS.1.3.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| Controlling the Plane | AR | SCI.3.NS.1.3.1.d | Communicate observations orally, in writing, and in graphic organizers (bar graphs) |
| Controlling the Plane | AR | SCI.3.NS.1.3.7 | Make and explain predictions based on prior knowledge |
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| **Courage to Soar** | | | |
| **2005 Science** | | | |
| **Curriculum Framework** | | | |
| **Arkansas Science** | | | |
| **Grade 4** | | | |
| **Activity/Lesson** | **State** | **Standards** | |
| Kite Flight | AR | SCI.4.NS.1.4.2 | Refine questions that guide scientific inquiry |
| Kite Flight | AR | SCI.4.NS.1.4.13 | Use simple equipment, age appropriate tools, technology, and mathematics in scientific investigations (e.g., balances, hand lenses, microscopes, rulers, thermometers, calculators, computers) |
| Soaring Higher | AR | SCI.4.NS.1.4.1.f | Communicate observations orally, in writing, and in graphic organizers (line graphs) |

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| Aviation Pioneers | AR | SCI.4.NS.1.4.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| Aviation Pioneers | AR | SCI.4.NS.1.4.9 | Identify variables that affect investigations |
| Having the Right Stuff | AR | SCI.4.NS.1.4.1.c | Communicate observations orally, in writing, and in graphic organizers (Venn diagrams) |
| Flying a Styrofoam Plane | AR | SCI.4.NS.1.4.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| Flying a Styrofoam Plane | AR | SCI.4.NS.1.4.8 | Develop a hypothesis based on prior knowledge and observations |
| Looking for Answers:A research project | AR | SCI.4.NS.1.4.7 | Collect and interpret measurable empirical evidence in teams and as individuals |
| The Matter of Air | AR | SCI.4.NS.1.4.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| The Matter of Air | AR | SCI.4.NS.1.4.8 | Develop a hypothesis based on prior knowledge and observations |
| The Four Forces of Flight | AR | SCI.4.NS.1.4.3.a | Conduct scientific investigations individually and in teams (lab activities) |
| The Four Forces of Flight | AR | SCI.4.PS.6.4.1 | Investigate the relationship between force and direction |
| Controlling the Plane | AR | SCI.4.NS.1.4.1.d | Communicate observations orally, in writing, and in graphic organizers (bar graphs) |
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| **Courage to Soar** | | | |
| **2005 Science** | | | |
| **Curriculum Framework** | | | |
| **Arkansas Science** | | | |
| **Grade 5** | | | |
| **Activity/Lesson** | **State** | **Standards** | |
| Kite Flight | AR | SCI.5.PS.5.5.10 | Investigate scientists, careers, and historical breakthroughs related to physical properties, physical changes, and states of matter |
| Kite Flight | AR | SCI.5.PS.6.5.7 | Investigate careers, scientists, and historical breakthroughs related to simple machines and potential and kinetic energy |
| Soaring Higher | AR | SCI.5.NS.1.5.4.d | Interpret scientific data using (line graphs) |
| Soaring Higher | AR | SCI.5.PS.5.5.10 | Investigate scientists, careers, and historical breakthroughs related to physical properties, physical changes, and states of matter |
| Soaring Higher | AR | SCI.5.PS.6.5.7 | Investigate careers, scientists, and historical breakthroughs related to simple machines and potential and kinetic energy |
| Aviation Pioneers | AR | SCI.5.NS.1.5.9 | Define and give examples of hypotheses |

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| Aviation Pioneers | AR | SCI.5.PS.5.5.10 | Investigate scientists, careers, and historical breakthroughs related to physical properties, physical changes, and states of matter |
| Aviation Pioneers | AR | SCI.5.PS.6.5.7 | Investigate careers, scientists, and historical breakthroughs related to simple machines and potential and kinetic energy |
| Aviation Pioneers | AR | SCI.5.ESS.10.5.6 | Investigate careers, scientists, and historical breakthroughs related to planets |
| Having the Right Stuff | AR | SCI.5.NS.1.5.4.f | Interpret scientific data using (Venn diagrams) |
| Having the Right Stuff | AR | SCI.5.PS.5.5.10 | Investigate scientists, careers, and historical breakthroughs related to physical properties, physical changes, and states of matter |
| Having the Right Stuff | AR | SCI.5.PS.6.5.7 | Investigate careers, scientists, and historical breakthroughs related to simple machines and potential and kinetic energy |
| Flying a Styrofoam Plane | AR | SCI.5.NS.1.5.2.a | Identify and define components of experimental design used to produce empirical evidence (hypothesis) |
| Flying a Styrofoam Plane | AR | SCI.5.NS.1.5.2.b | Identify and define components of experimental design used to produce empirical evidence (replication) |
| Looking for Answers:A research project | AR | SCI.5.NS.1.5.6 | Develop and implement strategies for long-term, accurate data collection |
| The Matter of Air | AR | SCI.5.NS.1.5.2.a | Identify and define components of experimental design used to produce empirical evidence (hypothesis) |
| The Matter of Air | AR | SCI.5.PS.5.5.8 | Model the motion and position of molecules in solids, liquids, and gases in terms of kinetic energy |
| The Matter of Air | AR | SCI.5.PS.5.5.10 | Investigate scientists, careers, and historical breakthroughs related to physical properties, physical changes, and states of matter |
| The Four Forces of Flight | AR | SCI.5.NS.1.5.2.b | Identify and define components of experimental design used to produce empirical evidence (replication) |
| Controlling the Plane | AR | SCI.5.NS.1.5.4.b | Interpret scientific data using (bar graphs) |