| Aeronautics Educator Guide | | | |
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| 1999 Science | | | |
| Core Curriculum | | | |
| **New York Science** | | | |
| **Grades K-4** | | | |
| **Activity/Lesson** | **State** | **Standards** | |
| Air Engines (12-16) | NY | SCI.K-4.1.S1.1a | Observe and discuss objects and events and record observations |
| Air Engines (12-16) | NY | SCI.K-4.1.S1.1b | Articulate appropriate questions based on observations |
| Air Engines (12-16) | NY | SCI.K-4.1.S2.3b | Record observations accurately and concisely |
| Air Engines (12-16) | NY | SCI.K-4.4.P5.1a | The position of an object can be described by locating it relative to another object or the background (e.g., on top of, next to, over, under, etc.). |
| Air Engines (12-16) | NY | SCI.K-4.4.P5.1b | The position or direction of motion of an object can be changed by pushing or pulling. |
| Rotor Motor (69-75) | NY | SCI.K-4.1.T1.2a | Identify appropriate questions to ask about the design of an object |
| Rotor Motor (69-75) | NY | SCI.K-4.4.P5.1a | The position of an object can be described by locating it relative to another object or the background (e.g., on top of, next to, over, under, etc.). |
| Rotor Motor (69-75) | NY | SCI.K-4.4.P5.1b | The position or direction of motion of an object can be changed by pushing or pulling. |
| Flight: Interdisciplinary Learning Activities (76-79) | NY | SCI.K-4.1.S2.1a | Indicate materials to be used and steps to follow to conduct the investigation and describe how data will be recorded (journal, dates and times, etc.) |
| Flight: Interdisciplinary Learning Activities (76-79) | NY | SCI.K-4.1.T1.4b | Build a model of the object, modifying the plan as necessary |
| Flight: Interdisciplinary Learning Activities (76-79) | NY | SCI.K-4.6.3.1 | observe that things in nature and things that people make have very different sizes, weights, and ages |
| Where is North? The Compass Can Tell Us (87-90) | NY | SCI.K-4.1.S2.1a | Indicate materials to be used and steps to follow to conduct the investigation and describe how data will be recorded (journal, dates and times, etc.) |
| Where is North? The Compass Can Tell Us (87-90) | NY | SCI.K-4.1.T1.2a | Identify appropriate questions to ask about the design of an object |
| Let's Build a Table Top Airport (91-96) | NY | SCI.K-4.1.S2.2a | Explain the steps of a plan to others, actively listening to their suggestions for possible modification of the plan, seeking clarification and understand- ing of the suggestions and modifying the plan where appropriate |
| Let's Build a Table Top Airport (91-96) | NY | SCI.K-4.1.T1.1c | Suggest ways the object can be made differently, fixed, or improved within given constraints |

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| Let's Build a Table Top Airport (91-96) | NY | SCI.K-4.1.T1.2a | Identify appropriate questions to ask about the design of an object |
| Let's Build a Table Top Airport (91-96) | NY | SCI.K-4.1.T1.4b | Build a model of the object, modifying the plan as necessary |
| Let's Build a Table Top Airport (91-96) | NY | SCI.K-4.6.2.2 | discover that a model of something is different from the real thing but can be used to study the real thing |
| Plan to Fly There (97-106) | NY | SCI.K-4.1.M2.1a | Explain verbally, graphically, or in writing the reasoning used to develop mathematical conclusions |
| Plan to Fly There (97-106) | NY | SCI.K-4.1.S3.2a | State, orally and in writing, any inferences or generalizations indicated by the data collected |
| Plan to Fly There (97-106) | NY | SCI.K-4.2.2.3 | identify and report sources in oral and written communications |
| We Can Fly, You and I: Interdisciplinary Learning (107-108) | NY | SCI.K-4.6.2.2 | discover that a model of something is different from the real thing but can be used to study the real thing |
| We Can Fly, You and I: Interdisciplinary Learning (107-108) | NY | SCI.K-4.6.2.3 | use different types of models, such as graphs, sketches, diagrams, and maps, to represent various aspects of the real world |
| We Can Fly, You and I: Interdisciplinary Learning (107-108) | NY | SCI.K-4.4.L7.1c | Humans, as individuals or communities, change environments in ways that can be either helpful or harmful for themselves and other organisms. |
| Dunked Napkin ( 17-22) | NY | SCI.K-4.1.S1.1a | Observe and discuss objects and events and record observations |
| Dunked Napkin ( 17-22) | NY | SCI.K-4.1.S1.1b | Articulate appropriate questions based on observations |
| Dunked Napkin ( 17-22) | NY | SCI.K-4.1.S3.2a | State, orally and in writing, any inferences or generalizations indicated by the data collected |
| Dunked Napkin ( 17-22) | NY | SCI.K-4.4.P3.1a | Matter takes up space and has mass. Two objects cannot occupy the same place at the same time. |
| Paper Bag Mask (23-28) | NY | SCI.K-4.1.S1.1b | Articulate appropriate questions based on observations |
| Paper Bag Mask (23-28) | NY | SCI.K-4.1.S3.2a | State, orally and in writing, any inferences or generalizations indicated by the data collected |
| Wind in Your Socks) (29-35) | NY | SCI.K-4.1.S1.1b | Articulate appropriate questions based on observations |
| Wind in Your Socks) (29-35) | NY | SCI.K-4.1.S2.3a | Use appropriate "inquiry and process skills" to collect data |
| Wind in Your Socks) (29-35) | NY | SCI.K-4.1.S3.4b | State, orally and in writing, any new questions that arise from their investigation |
| Wind in Your Socks) (29-35) | NY | SCI.K-4.1.T1.2a | Identify appropriate questions to ask about the design of an object |
| Wind in Your Socks) (29-35) | NY | SCI.K-4.1.M3.1a | Use appropriate scientific tools, such as metric rulers, spring scale, pan balance, graph paper, thermometers [Fahrenheit and Celsius], graduated cylinder to solve problems about the natural world |
| Air: Interdisciplinary Learning Activities (36-39) | NY | SCI.K-4.1.T1.2a | Identify appropriate questions to ask about the design of an object |

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| Air: Interdisciplinary Learning Activities (36-39) | NY | SCI.K-4.1.T1.2b | Identify the appropriate resources to use to find out about the design of an object |
| Bag Balloons (40-43) | NY | SCI.K-4.1.T1.2a | Identify appropriate questions to ask about the design of an object |
| Sled Kite (44-51) | NY | SCI.K-4.7.1.3 | design solutions to problems involving a familiar and real context, investigate related science concepts to determine the solution, and use mathematics to model, quantify, measure, and compute |
| Right Flight (52-59) | NY | SCI.K-4.1.T1.4b | Build a model of the object, modifying the plan as necessary |
| Right Flight (52-59) | NY | SCI.K-4.6.2.1 | analyze, construct, and operate models in order to discover attributes of the real thing |
| Right Flight (52-59) | NY | SCI.K-4.6.2.2 | discover that a model of something is different from the real thing but can be used to study the real thing |
| Delta Wing Glider (60-68) | NY | SCI.K-4.6.2.1 | analyze, construct, and operate models in order to discover attributes of the real thing |
| Delta Wing Glider (60-68) | NY | SCI.K-4.6.2.2 | discover that a model of something is different from the real thing but can be used to study the real thing |
| Delta Wing Glider (60-68) | NY | SCI.K-4.7.1.3 | design solutions to problems involving a familiar and real context, investigate related science concepts to determine the solution, and use mathematics to model, quantify, measure, and compute |