

Aeronautics Educator Guide			
2006 21st Century Mathematics			
Standards and Objectives			
West Virginia 21st Century Mathematics			
Grade 2			
Activity/Lesson	State	Standards	
Rotor Motor (69-75)	WV	MA.2.M.O.2.5.4	formulate questions, collect data, organize and display as a chart, table or bar graph.
Flight: Interdisciplinary Learning Activities (76-79)	WV	MA.2.M.O.2.5.3	analyze data represented on a graph using grade-appropriate questions.
Flight: Interdisciplinary Learning Activities (76-79)	WV	MA.2.M.O.2.5.4	formulate questions, collect data, organize and display as a chart, table or bar graph.
We Can Fly, You and I: Interdisciplinary Learning (107-108)	WV	MA.2.M.O.2.5.3	analyze data represented on a graph using grade-appropriate questions.
Dunked Napkin (17-22)	WV	MA.2.M.O.2.5.3	analyze data represented on a graph using grade-appropriate questions.
Dunked Napkin (17-22)	WV	MA.2.M.O.2.5.4	formulate questions, collect data, organize and display as a chart, table or bar graph.
Paper Bag Mask (23-28)	WV	MA.2.M.O.2.3.2	compare and contrast plane and solid geometric shapes.
Paper Bag Mask (23-28)	WV	MA.2.M.O.2.3.4	model and draw line segments and angles.
Aeronautics Educator Guide			
2006 21st Century Mathematics			
Standards and Objectives			
West Virginia 21st Century Mathematics			
Grade 3			
Activity/Lesson	State	Standards	
Air Engines (12-16)	WV	MA.3.M.O.3.4.1. a	length in centimeters and inches,
Flight: Interdisciplinary Learning Activities (76-79)	WV	MA.3.M.O.3.5.3	analyze real-world data represented on a graph using grade-appropriate questions.
Making Time Fly (80-86)	WV	MA.3.M.O.3.5.1	collect and organize grade-appropriate real-world data from observation, surveys, and experiments, and identify and construct appropriate ways to display data.
Let's Build a Table Top Airport (91-96)	WV	MA.3.M.O.3.4.2	estimate and find the perimeter and area of familiar geometric shapes, using manipulatives, grids, or appropriate measuring tools.
We Can Fly, You and I: Interdisciplinary Learning (107-108)	WV	MA.3.M.O.3.4.4	read time to 5-minute intervals (am and pm) using analog and digital clocks, compute elapsed time to the quarter-hour using a clock.

We Can Fly, You and I: Interdisciplinary Learning (107-108)	WV	MA.3.M.O.3.5.3	analyze real-world data represented on a graph using grade-appropriate questions.
Dunked Napkin (17-22)	WV	MA.3.M.O.3.5.1	collect and organize grade-appropriate real-world data from observation, surveys, and experiments, and identify and construct appropriate ways to display data.
Dunked Napkin (17-22)	WV	MA.3.M.O.3.5.3	analyze real-world data represented on a graph using grade-appropriate questions.
Paper Bag Mask (23-28)	WV	MA.3.M.O.3.3.4	identify, describe and draw lines of symmetry in two-dimensional shapes.
Paper Bag Mask (23-28)	WV	MA.3.M.O.3.4.1. a	length in centimeters and inches,
Paper Bag Mask (23-28)	WV	MA.3.M.O.3.4.2	estimate and find the perimeter and area of familiar geometric shapes, using manipulatives, grids, or appropriate measuring tools.
Wind in Your Socks) (29-35)	WV	MA.3.M.O.3.4.1. a	length in centimeters and inches,
Wind in Your Socks) (29-35)	WV	MA.3.M.O.3.4.2	estimate and find the perimeter and area of familiar geometric shapes, using manipulatives, grids, or appropriate measuring tools.

**Aeronautics Educator Guide
2006 21st Century Mathematics
Standards and Objectives**

West Virginia 21st Century Mathematics			
Grade 4			
Activity/Lesson	State	Standards	
Air Engines (12-16)	WV	MA.4.M.O.4.4.1	select appropriate measuring tools, apply and convert standard units within a system to estimate, measure, compare and order real-world measurements including: lengths using customary (to the nearest one-fourth inch) and metric units, weight, capacity, temperature, and justify and present results.
Rotor Motor (69-75)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Flight: Interdisciplinary Learning Activities (76-79)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Making Time Fly (80-86)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Where is North? The Compass Can Tell Us (87-90)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.

We Can Fly, You and I: Interdisciplinary Learning (107-108)	WV	MA.4.M.O.4.4.3	read time to the minute, calculate elapsed time in hours/minutes within a 24-hour period.
We Can Fly, You and I: Interdisciplinary Learning (107-108)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Dunked Napkin (17-22)	WV	MA.4.M.O.4.5.1	read and interpret information represented on a circle graph.
Dunked Napkin (17-22)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Paper Bag Mask (23-28)	WV	MA.4.M.O.4.3.6	draw and identify parts of a circle: center point, diameter, and radius.
Paper Bag Mask (23-28)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Wind in Your Socks) (29-35)	WV	MA.4.M.O.4.4.1	select appropriate measuring tools, apply and convert standard units within a system to estimate, measure, compare and order real-world measurements including: lengths using customary (to the nearest one-fourth inch) and metric units, weight, capacity, temperature, and justify and present results.
Wind in Your Socks) (29-35)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Sled Kite (44-51)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Right Flight (52-59)	WV	MA.4.M.O.4.4.1	select appropriate measuring tools, apply and convert standard units within a system to estimate, measure, compare and order real-world measurements including: lengths using customary (to the nearest one-fourth inch) and metric units, weight, capacity, temperature, and justify and present results.
Right Flight (52-59)	WV	MA.4.M.O.4.5.2	pose a grade-appropriate question that can be addressed with data, collect, organize, display, and analyze data in order to answer the question.
Delta Wing Glider (60-68)	WV	MA.4.M.O.4.4.1	select appropriate measuring tools, apply and convert standard units within a system to estimate, measure, compare and order real-world measurements including: lengths using customary (to the nearest one-fourth inch) and metric units, weight, capacity, temperature, and justify and present results.