

<b>Exploring Aeronautics</b>			
<b>1997 Mathematics</b>			
<b>Learning Standards</b>			
<b>Illinois Mathematics</b>			
<b>Grades 4-5</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Wings(177-208)	IL	MA.4-5.7.A.2a	Calculate, compare and convert length, perimeter, area, weight/mass and volume within the customary and metric systems.
Wings(177-208)	IL	MA.4-5.7.C.2b	Construct or draw figures with given perimeters and areas.
The Resource Center	IL	MA.4-5.6.A.2	Compare and order whole numbers, fractions and decimals using concrete materials, drawings and mathematical symbols.
Science of Flight	IL	MA.4-5.7.A.2a	Calculate, compare and convert length, perimeter, area, weight/mass and volume within the customary and metric systems.
Science of Flight	IL	MA.4-5.10.B.2a	Formulate questions of interest and select methods to systematically collect data.
Science of Flight	IL	MA.4-5.10.B.2b	Collect, organize and display data using tables, charts, bar graphs, line graphs, circle graphs, line plots and stem-and-leaf graphs.
Integrating with Aeronautics	IL	MA.4-5.6.A.2	Compare and order whole numbers, fractions and decimals using concrete materials, drawings and mathematical symbols.
Integrating with Aeronautics	IL	MA.4-5.6.C.2a	Select and perform computational procedures to solve problems with whole numbers, fractions and decimals.
Integrating with Aeronautics	IL	MA.4-5.6.D.2	Describe the relationship between two sets of data using ratios and appropriate notations (e.g., a/b, a to b, a:b).
Integrating with Aeronautics	IL	MA.4-5.7.A.2a	Calculate, compare and convert length, perimeter, area, weight/mass and volume within the customary and metric systems.
Integrating with Aeronautics	IL	MA.4-5.8.A.2b	Construct and solve number sentences using a variable to represent an unknown quantity.
Scientific Method(124-144)	IL	MA.4-5.10.B.2a	Formulate questions of interest and select methods to systematically collect data.
Scientific Method(124-144)	IL	MA.4-5.10.B.2b	Collect, organize and display data using tables, charts, bar graphs, line graphs, circle graphs, line plots and stem-and-leaf graphs.
Scientific Method(124-144)	IL	MA.4-5.10.B.2d	Interpret results or make relevant decisions based on the data gathered.
<b>Exploring Aeronautics</b>			
<b>1997 Mathematics</b>			
<b>Learning Standards</b>			
<b>Illinois Mathematics</b>			
<b>Grades 6-8</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Science of Flight	IL	MA.6-8.7.A.3a	Measure length, capacity, weight/mass and angles using sophisticated instruments (e.g., compass, protractor, trundle wheel).

Science of Flight	IL	MA.6-8.7.A.3b	Apply the concepts and attributes of length, capacity, weight/mass, perimeter, area, volume, time, temperature and angle measures in practical situations.
Science of Flight	IL	MA.6-8.10.B.3	Formulate questions (e.g., relationships between car age and mileage, average incomes and years of schooling), devise and conduct experiments or simulations, gather data, draw conclusions and communicate results to an audience using traditional methods and contemporary technologies.
Integrating with Aeronautics	IL	MA.6-8.6.D.3	Apply ratios and proportions to solve practical problems.
Integrating with Aeronautics	IL	MA.6-8.7.A.3a	Measure length, capacity, weight/mass and angles using sophisticated instruments (e.g., compass, protractor, trundle wheel).
Integrating with Aeronautics	IL	MA.6-8.8.A.3b	Solve problems using linear expressions, equations and inequalities.
Integrating with Aeronautics	IL	MA.6-8.8.D.3a	Solve problems using numeric, graphic or symbolic representations of variables, expressions, equations and inequalities.
Integrating with Aeronautics	IL	MA.6-8.9.C.3a	Construct, develop and communicate logical arguments (informal proofs) about geometric figures and patterns.
Integrating with Aeronautics	IL	MA.6-8.9.D.3	Compute distances, lengths and measures of angles using proportions, the Pythagorean theorem and its converse.
Scientific Method(124-144)	IL	MA.6-8.10.A.3a	Construct, read and interpret tables, graphs (including circle graphs) and charts to organize and represent data.
Scientific Method(124-144)	IL	MA.6-8.10.B.3	Formulate questions (e.g., relationships between car age and mileage, average incomes and years of schooling), devise and conduct experiments or simulations, gather data, draw conclusions and communicate results to an audience using traditional methods and contemporary technologies.