

<b>Smart Skies</b>			
<b>2009 Mathematics</b>			
<b>Content Standards</b>			
<b>Montana Mathematics</b>			
<b>Grades 5-8</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Fly by Math	MT	MA.5-8.2.1	Collect data from a variety of contexts (e.g., science, history, and culture, including Montana American Indians). Organize and represent data in box plots, scatter plots, histograms, and circle graphs using technology when appropriate.
Fly by Math	MT	MA.5-8.2.2	Interpret, analyze, and evaluate data using mean, median, range, and quartiles to identify trends and make decisions and predictions about data within scientific and cultural contexts, including those of Montana American Indians.
Fly by Math	MT	MA.5-8.3.1	Define, classify and compare properties of solids and plane figures, including lines and angles.
Fly by Math	MT	MA.5-8.3.2	Use spatial reasoning to determine congruence, similarity, and symmetry of objects in mathematics, art, science, and culture, including Montana American Indians.
Fly by Math	MT	MA.5-8.3.3	Define, identify, and execute transformations including translations, rotations, reflections, and dilations with appropriate technology.
Line Up with Math	MT	MA.5-8.1.5	Use metric and standard units of measurement in relevant scientific and cultural situations, including those of Montana American Indians, compare and convert within systems, and use appropriate technology.
Line Up with Math	MT	MA.5-8.3.1	Define, classify and compare properties of solids and plane figures, including lines and angles.
Line Up with Math	MT	MA.5-8.3.2	Use spatial reasoning to determine congruence, similarity, and symmetry of objects in mathematics, art, science, and culture, including Montana American Indians.
Line Up with Math	MT	MA.5-8.3.3	Define, identify, and execute transformations including translations, rotations, reflections, and dilations with appropriate technology.
Line Up with Math	MT	MA.5-8.3.4	Measure and compute angles, perimeter, area, surface area, and volume including the use of formulas and choosing appropriate units.
Line Up with Math	MT	MA.5-8.4.5	Identify and compute rate of change/slope and intercepts from equations, graphs, and tables; model and solve contextual problems involving linear proportions or direct variation using cultural contexts, including those of Montana American Indians.

<b>Smart Skies</b>			
<b>2009 Mathematics</b>			
<b>Content Standards</b>			
<b>Montana Mathematics</b>			
<b>Grades 9-12</b>			
<b>Activity/Lesson</b>	<b>State</b>	<b>Standards</b>	
Fly by Math	MT	MA.9-12.2.1	Select, create, and compare graphical or numerical representations of data sets using technology when appropriate. Reason about distributions using measures of central tendency and spread (e.g., percentiles, quartiles, inter-quartile range, and standard deviation).
Fly by Math	MT	MA.9-12.2.2	Evaluate the validity of reports based on collected and/or published data by considering the source of the data, the design of the study, and the way data are displayed, analyzed, and interpreted.
Fly by Math	MT	MA.9-12.3.2	Use spatial reasoning and geometric models to solve problems with and without technology in the contexts of art, science, and culture, including Montana American Indians.
Line Up with Math	MT	MA.9-12.3.2	Use spatial reasoning and geometric models to solve problems with and without technology in the contexts of art, science, and culture, including Montana American Indians.
Line Up with Math	MT	MA.9-12.3.4	Determine measures of two- and three-dimensional objects and their elements using trigonometric ratios, proportionality, the Pythagorean Theorem, and angle relationships.