

Essential Content: Grade 8

Connected Mathematics Project (CMP) 2006-2007

Units suggested order	Content	Essential Investigations	Essential ACE Prob.	Supplemental Material	Materials on district CMP web site	Time Line 06-07
Samples & Populations	<u>Data and Statistics</u> : Analyze data sets classified by attributes; review stem-and-leaf plots; introduce box plots ; distinguish samples from populations; use samples to make predictions about a population; to design a survey; describe and compare samples	1 2 3	Explicitly do multiple representations of data (see p. 23d)	<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk Review for WKCE using short warm-ups and/or with homework. Use class time to teach CMP Review mean, median, mod, range; basic probability (i.e. fair and unfair, prob. of an event, and permutations) Investigation 4 for high achieving students 	<ul style="list-style-type: none"> Unit Plan ACE Mods Challenge Earning Gap Act. 	Sep 5- Sep 22 14 days
Kaleidoscopes Hubcaps, & Mirrors	<u>Symmetry & Transformations</u> : recognize reflectional, rotational, translational symmetry; develop techniques to create symmetric figures; relationships of a figure and its image following transformations; effects of combining reflections	1 2 3	p. 16 #4-8 Labsheet p. 39-40 #21, 22	<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk patty paper Review for WKCE using short warm-ups and/or with homework. Use class time for curriculum. Polygon angle sum Investigation 4 for high achieving students 	<ul style="list-style-type: none"> Unit Plan Challenge Activity 	Sep 25- Oct 20 19 days
Moving Straight Ahead	<u>Linear Equations</u> : Identify, represent, and interpret linear relationships in tables, graphs, equations; fluency among representations; $y = mx + b$ form; locate/interpret intersections points of two graphs; x & y intercepts; use graphing calculators	1 2 3 4 5		<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk Review for WKCE using short warm-ups and/or with homework. Use class time to teach the curriculum. Inv. 6 for high achieving students Order of operations 	<ul style="list-style-type: none"> Accomm. ACE mods Challenge 	Oct 23- Dec 22 38 days
Thinking With Math Models	<u>Modeling Relationships</u> : Use intuitive ideas about rates of change to sketch graphs for and match graphs to given situations, and create stories to fit given graphs.	4.1, 4.2	p. 52-53 #1, 5	<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk 	<ul style="list-style-type: none"> Unit Plan Challenge Activity 	Dec 14- Dec 23 8 days
Looking For Pythagoras	<u>Pythagorean Theorem</u> : develop strategies to find areas of polygons on a dot grid; find the length of line segments on a grid; square roots; Pythagorean Theorem; use graphing calculators regularly	1 2 3.1, 3.1, 3.3 4.1	p. 22 # 1, 2 Labsheet p. 48-49 #5, 6	<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk 3.4, 4.2, & 4.3 for high achieving students 	<ul style="list-style-type: none"> Accomm. Activities Challenge 	Jan 8- Feb 8 21 days

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Growing, Growing, Growing	<u>Exponential Relationships</u> : Build and analyze exponential models; make sense of symbols in $y = ab^x$; model with exponential functions; growth and decay; use graphing calculators regularly	1 2 3 4.1, 4.2, 4.3	p. 11 # 3 p. 12 # 4-9 p. 22 #1 p. 24 #5-8 p. 26 #11 p.38 -39 #1, 3, 5	<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk Order of Operations 	<ul style="list-style-type: none"> Unit Plan Mega Penny Project Challenge 	Feb 12- Mar 16 24 days
Frogs, Fleas, and Painted Cubes	<u>Quadratic Relationships</u> : Analyze quadratic relation-ships with tables, graph equations; identify linear, exponential, quadratic functions through comparison of tables, graphs, equations; maximum and minimum; contextual meaning; effects of changing scale; use graphing calculators regularly.	1 2 3 4	p. 48 #14 p. 60 #1 p. 61 #2 p. 62 #10 p. 65 #18	<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk Inv. 5 for high achieving students 	<ul style="list-style-type: none"> Challenge 	Mar 19- Apr 27 23 days
Say It With Symbols	<u>Algebraic Reasoning</u> : Symbolic sense-making; properties including distributive; model and solve linear & quadratic equations; use graphing calculators regularly.	1 2 3 4	p. 26 -30 #1-20 p. 44-45 #1-21 p. 59 #1-10	<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk 	<ul style="list-style-type: none"> Unit Plan Challenge 	Apr 30- May 25 19 days
Clever Counting	<u>Combinatorics</u> : Construct lists, diagrams, tables, symbolic exp. to organize possible outcomes; permutations, use graphing calculator to compute factorials.	1 2		<ul style="list-style-type: none"> Krypto Game, 24 Game, Contag (Contig) Math Talk Inv. 3 for high achieving students 	<ul style="list-style-type: none"> Unit Plan Challenge 	May 29- June 15 14 days

MMSD CMP web site: http://dww.madison.k12.wi.us/tl/math/middle_school/default.htm