

JCPS MIDDLE GRADES MATHEMATICS CURRICULUM MAP 2005-2006

The Kentucky Core Content, version 4.0, was revised in June 2005 and will be field tested this year and fully implemented in 2006-07. To ease in this transition, the JCPS Curriculum and Assessment map has been revised. The number in the parentheses in the map below refers to the Core Content bullet, version 4.0.

- Teachers should use this document instead of the spiral bound JCPS Middle School Curriculum and Assessment Map.
- Teaching strategies in the JCPS Mathematics Core Content Guide, version 2.0, can be used in conjunction with this document.

6th grade	7th grade	8th grade
Factors & Multiples <u>Prime Time</u> (18 days) August 16 - September 9 Core Content: 1.5.1 CCA#1	Integers <u>Accentuate the Negative</u> (14 days) August 16 - September 2 Core Content: 1.1.1, 1.1.2, 1.3.1, 3.3.1 CCA#1	Statistics <u>Samples & Populations</u> (14 days) August 16 - September 2 Core Content: 4.1.1, 4.1.2, 4.2.1 CCA#1
Statistics <u>Data About Us</u> (19 days) September 12 - October 7 Core Content: 4.1.1, 4.1.2, 4.2.1 CCA#2	Using Tables, Graphs and Variables <u>Variables & Patterns</u> (18 days) September 6 - September 29 Core Content: 4.1.1, 4.1.2, 5.1.1, 5.1.2, 5.1.3 CCA#2	Integer Operations/Solving Simple Equations (14 days) September 6 - September 23 Core Content: 1.3.1, 1.5.2, 5.2.1, 5.3.1 Linear Relationships <u>Moving Straight Ahead</u> (17 days) September 26 - October 21 Core Content: 1.3.1, 1.4.1, 3.3.1, 4.1.1, 4.1.2, 5.1.2, 5.1.3, 5.3.1 CCA#2
Fractions, Decimals & Percents <u>Bits & Pieces I</u> (27 days) October 10 - November 18 Core Content: 1.1.1, 1.1.2, 1.4.1 CCA#3	Simplifying Expressions / Solving Equations and Inequalities (18 days) October 3 - October 28 Core Content: 1.3.1, 1.5.2, 5.2.1, 5.3.1 CCA#3	Representing Relationships <u>Thinking with Mathematical Models</u> (14 days) October 24 - November 11 Core Content: 3.3.1, 4.1.1, 4.1.2, 5.1.2, 5.1.3, 5.2.1 CCA#3
Polygons and Angles <u>Shapes & Designs</u> (18 days) November 21 - December 16 Core Content: 3.1.1, 3.1.2, 3.1.4, 3.2.2, 3.3.1 CCA#4	Similarity <u>Stretching & Shrinking</u> (17 days) October 31 - November 23 Core Content: 1.4.1, 3.1.4 CCA#4	Measurement/Pythagorean Theorem <u>Looking for Pythagoras</u> (18 days) November 14 - December 9 Core Content: 1.1.1, 1.1.2, 1.3.1, 2.1.1, 2.1.2, 2.1.4, 2.2.1, 3.1.2, 3.3.1 Transformations (5 days) December 12 - December 16 Core Content: 2.1.1, 2.1.2, 3.2.2 CCA#4
Algebraic Thinking (9 days) January 3 - January 13 Core Content: 1.5.2, 5.1.1, 5.1.2, 5.2.1, 5.3.1 CCA#5	Ratio, Proportion, and Percent <u>Comparing & Scaling</u> (24 days) November 28 - January 13 Core Content: 1.1.1, 1.1.2, 1.3.1, 1.4.1 CCA#5	Solving Equations and Inequalities <u>Sav It With Symbols</u> (27 days) January 3 - February 10 Core Content: 1.3.1, 1.5.2, 5.1.2, 5.2.1, 5.3.1 CCA#5

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<p>Using Rational Numbers</p> <p><u>Bits & Pieces II</u> (30 days) January 18 - March 2</p> <p>Core Content: 1.2.1, 1.3.1 <i>CCA#6</i></p>	<p>Number Theory/Number Sense Review</p> <p>(8 days) January 18 -27</p> <p>Core Content: 1.2.1, 1.3.1, 1.5.1 <i>CCA#6</i></p>	<p>Measurement/ Geometry Review</p> <p><u>Filling and Wrapping</u> (12 days) February 13 - March 2</p> <p>Core Content: 2.1.1, 2.1.3, 3.1.2, 3.1.3 <i>CCA#6</i></p>
<p>Perimeter and Area</p> <p><u>Covering and Surrounding</u> (20 days) March 6 - March 31</p> <p>Core Content: 2.1.1, 3.1.1, 3.1.2 <i>CCA#7</i></p>	<p>Probability</p> <p><u>What Do You Expect?</u> (10 days) January 30 - February 10</p> <p>Core Content: 4.4.1, 4.4.2 <i>CCA#7</i></p>	<p>Ratio/Proportions, Congruent/ Similar</p> <p>(15 days) March 6 - March 24</p> <p>Core Content: 1.2.1, 1.4.1, 3.1.4 <i>CCA#7</i></p>
<p>Probability</p> <p><u>How Likely Is It?</u> (15 days) April 10 - April 28</p> <p>Core Content: 4.4.1, 4.4.2 <i>CCA#8</i></p>	<p>2-D and 3-D Geometry/Measurement</p> <p>(22 days) February 13 - March 17</p> <p>Core Content: 1.1.1, 1.1.2, 2.1.1, 3.1.2 <i>CCA#8</i></p>	<p>Probability</p> <p>(15 days) March 27 - April 21</p> <p>Core Content: 4.4.1, 4.4.2 <i>CCA#8</i></p>
<p>Algebraic Thinking</p> <p>(17 days) May 1 – May 25</p> <p>Core Content: 1.5.2, 5.1.1, 5.1.2, 5.2.1, 5.3.1 <i>CCA#9</i></p>	<p>Data/Statistics</p> <p>(20 days) March 20 - April 21</p> <p>Core Content: 4.1.1, 4.1.2, 4.2.1 <i>CCA#9</i></p>	<p>Exponential Relationships</p> <p><u>Growing, Growing, Growing</u></p> <p>(22 days) April 24 – May 25</p> <p>Core Content: 5.1.2, 5.1.3 <i>CCA#9</i></p>
	<p>Integer Operations/Order of Operations/Algebraic Thinking</p> <p>(22 days) April 24 – May 25</p> <p>Core Content: 1.1.1, 1.3.1, 1.4.1, 1.5.2, 3.3.1 <i>CCA#10</i></p>	

Recommended Adjustments for CMP implementation in order to cover all of the Core Content, version 4.0: The number in the parentheses beside each unit refers to the Core Content bullet, version 4.0. The teaching suggestions for each unit include investigations/problems to teach, investigations/problems to delete since they are not core content, and core content to be taught since they are not in CMP. Some of the recommendations are for 2005-06 testing only.

Suggested Resources to supplement CMP:

- Great Source materials
- Neufeld Math software
- Prentice Hall Skills kit

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GRADE 6

Unit 1: Prime Time (1.5.1)

Omit from CMP; not Core Content:

- 2.2, 3.1, 4.2, and 5.1

Unit 2: Data About Us (4.1.1, 4.1.2, 4.2.1)

- Combine problems 2.1 and 2.2 into one lesson

Omit from CMP; not Core Content:

- Problem 5.4

Core Content not in CMP; teach using supplementary resource:

- Line graphs

Core Content not in CMP; teach using supplementary resource (2005-06 only):

- Circle graphs
- How different representations of data (e.g., tables, stem-and-leaf, bar graph, line plot) are related
- How data gathering affects interpretations/conclusions about data

Unit 3: Bits and Pieces I (1.1.1, 1.1.2, 1.4.1)

Omit from CMP; not Core Content:

- Problem 4.4

Core Content not in CMP; teach using supplementary resource:

- Strengthen the concept of ratios (1.4.1)
- Place value of whole numbers /decimals, and positive whole number exponents (2005-06 only):

Unit 4: Shapes and Designs (3.1.1, 3.1.2, 3.1.4, 3.2.2, 3.3.1)

Omit from CMP; not Core Content:

- Problems 3.4, 3.6, 6.1, 6.2, and 6.3

Core Content not in CMP; teach using supplementary resource:

- Points, lines, planes, and segments
- Congruence and similarity
- Transformations in the first quadrant.
- Strengthen coordinate geometry
- Measurement to the nearest eighth of an inch
- 3-d shapes, symmetry, U.S. customary and metric units of measure, estimate measurements in standard units including fractions and decimals, and estimate and determine measurement of angles (2005-06 only):

Unit 5: Algebraic Thinking Unit (5.1.1, 5.1.2, 5.2.1, 5.3.1, 1.5.2)

Core Content not in CMP; teach using supplementary resource (2005-06 only):

- How operations (+ and -, & * and /) are inversely related

Unit 6: Bits and Pieces II (1.2.1, 1.3.1)

Omit from CMP; not Core Content:

- Problem 5.3

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Core Content not in CMP; teach using supplementary resource:

- Order of operations

Unit 7: Covering and Surrounding (2.1.1, 3.1.1, 3.1.2)

Omit from CMP; not Core Content:

- Problems 1.2, 5.3, 6.3, and Investigation 7

Unit 8: How Likely Is It? (4.4.1, 4.4.2)

Omit from CMP; not Core Content:

- Investigations 6 and 7

GRADE 7

Unit 1: Accentuate the Negative (1.1.1, 1.3.1, 3.3.1)

- Integer Operations: **Addition and Subtraction only.**
- Teach ONLY Investigations 1, 2, 3, and 5.1.

Unit 2: Variables & Patterns (4.1.1, 4.1.2, 5.1.1, 5.1.2, 5.1.3)

- Eliminate problems 2.4 and 2.5
- Investigation 5 on using a graphing calculator is optional; embed graphing calculator skills throughout the unit.

Unit 3: Simplifying Expressions/Solving Equations& Inequalities Unit (1.3.1, 1.5.2, 5.2.1, 5.3.1)

- Use algebra tiles to model expressions and equations.

Core Content to teach for 2005-06 only:

- How operations are inversely related, and adding like terms

Unit 4: Stretching & Shrinking (1.1.1, 3.1.4)

Omit from CMP; not Core Content:

- Investigation 6

Unit 5: Comparing & Scaling (1.1.1, 1.1.2, 1.3.1, 1.4.1)

Omit from CMP; not Core Content:

- Problems 5.5 and 6.1

Core Content not in CMP; teach using supplementary resource:

- Conversions with decimals

Unit 6: Number Theory/Number Sense Review (1.5.1, 1.2.1, 1.3.1)

Unit 7: What Do You Expect? (4.4.1, 4.4.2)

- Teach Investigations 1 and 2

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Unit 8: 2-D and 3-D Geometry/Measurement Unit (2.1.1, 3.1.2)

In addition to Core Content 4.0 bullets 2.1.1 and 3.1.2, teach using supplementary resources (2005-06 only):

- The identification with the correct notation, label, and name of the basic geometric elements
- Symmetry
- U.S. customary and metric units of measure
- Transformations in coordinate plane: translate and reflect
- Estimate and determine measurement of angles
- How measurement and measurement formulas are related or different (perimeter and area of rectangles)

Unit 9: Data/ Statistics Unit (4.1.1, 4.1.2, 4.2.1)

In addition to Core Content 4.0 bullets 4.1.1, 4.1.2, and 4.2.1, teach using supplementary resources (2005-06 only):

- How different representations of data (e.g., tables, circle graphs, line graphs, bar graphs, line plots, etc) are related
 - How data gathering and misleading representations affect interpretations and conclusions about data (e.g., changing the scale on a graph, polling only a specific group of people, using limited or extremely small sample size)
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GRADE 8

Unit 1: Samples and Populations (4.1.1, 4.1.2, 4.2.1)

- Teach Investigation 1 only
- Omit line graphs until next unit

Core Content not in CMP; teach using supplementary resource:

- Circle graphs and Venn diagrams

Unit 2:

Integer Operations/Solving Simple Equations Unit (1.3.1, 1.5.2, 5.2.1, 5.3.1)

- Review integer operations
- Use algebra tiles to model equations.

Moving Straight Ahead (1.3.1, 1.4.1, 3.3.1, 4.1.1, 4.1.2, 5.1.2, 5.1.3, 5.3.1)

- Teach Investigations 1, 2, and 3 only

Unit 3: Thinking with Mathematical Models (1.3.1, 1.4.1, 3.3.1, 4.1.1, 4.1.2, 5.1.2, 5.1.3, 5.3.1)

- Investigation 1.3: Include the meaning of rate of change (5.1.3)

Omit from CMP; not Core Content:

- Problem 1.5

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Unit 4:

Looking for Pythagoras (1.1.1, 1.1.2, 1.3.1, 2.1.1, 2.1.2, 2.1.4, 2.2.1, 3.1.2)

Core Content not in CMP; teach using supplementary resource (2005-06 only):

- Properties of polygons
- Angles and angle measures
- Customary and metric units of measure

Transformations Unit (2.1.1, 2.1.2, 3.2.2)

Unit 5: Say It With Symbols (1.3.1, 1.5.2, 5.1.2, 5.2.1, 5.3.1)

- Use algebra tiles to develop the concepts in Investigation 4
- Do unit project

Omit from CMP; not Core Content:

- Investigation 5

Core Content not in CMP; teach using supplementary resource (2005-06 only):

- Solve inequalities

Unit 6: Filling and Wrapping (2.1.1, 2.1.3, 3.1.2, 3.1.3)

- Eliminate Investigations 4-7
- Surface area of rectangular prisms (2005-06 only)

Core Content not in CMP; teach using supplementary resource:

- Circumference and area of circles

Unit 7: Ratio/Proportion/Congruent/Similar Unit (1.2.1, 1.4.1, 3.1.4)

Unit 8: Probability Unit (4.4.1, 4.4.2)

Unit 9: Growing, Growing, Growing (5.1.2, 5.1.3)