

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students demonstrate number sense, including an understanding of number systems and operations and how they relate to one another. Students compute fluently and make reasonable estimates using paper and pencil, technology-supported and mental methods.  
**Benchmark:** A. Use place value concepts to represent whole numbers using numerals, words and physical models. B. Recognize, classify, compare and order whole numbers.  
**Content Organizer:** *Number and Number Systems*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
<p>1. Use place value concepts to represent whole numbers using physical models, numerals, and words, with ones, tens and hundreds.</p> <p>(a) Recognize 10 can mean “10 ones” or a single entity (1 ten) through physical models and trading games.</p> <p>(b) Read and write 3-digit numerals (e.g., 243 as two hundred forty three, 24 tens and 3 ones, or 2 hundreds and 43 ones, etc.) and construct models to represent each.</p>	<p>a.) *Regroup and Record *Practice sheets</p> <p>*Calendar Activities Use straws, pennies, etc. to keep track of days making group of tens and ones.</p> <p>b.) *Different Ways * Show and Write *Practice sheets</p> <p>*Saxon Lessons – 38, 43, 79, 81</p>	<p>a.)*Houghton Mifflin p. 71B-72</p> <p>*p. 71 Student Workbook *p. 20 Practice, Reteach, and Challenge Workbook</p> <p>b.)Houghton Mifflin p. 523A-524</p> <p>*p. 523 Student Workbook *p. 141 Practice, Reteach, and Challenge Workbook</p> <p>Playing cards (38) Pennies (43) Linking Cubes (79)</p>	<p>a.) Observation Chapter Test Practice sheets</p> <p>*Observation &amp; discussion</p> <p>b.) Orally Chapter test Practice sheets</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** B. B. Recognize, classify, compare and order whole numbers.

**Content Organizer:** *Number and Number Systems*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
2. Recognize and classify numbers as even or odd.	<ul style="list-style-type: none"> <li>*Practice counting by 2's and discuss that counting by 2's is saying the even numbers. Count odd numbers.</li> <li>*Pick Two</li> <li>*Even or Odd</li> <li>*Practice sheets</li> <li>*Saxon Lesson 17</li> </ul>	<ul style="list-style-type: none"> <li>*Houghton Mifflin p. 81A-82</li> <li>*p. 81 Student Workbook</li> <li>*p. 23 Practice, Reteach, and Challenge Workbook</li> <li>*20 Color Tiles</li> </ul>	<ul style="list-style-type: none"> <li>*Oral/Observation</li> <li>*Chapter test</li> <li>*Practice sheets</li> </ul>

## Mathematics – Grade 2

Adams County/Ohio Valley

Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** E. Make change using coins for values up to one dollar.

**Content Organizer:** *Number and Number Systems*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
3. Count money and make change using coins and a dollar bill.	Identifying and Counting Money *Spin to Win *Coin Collector *Money Match *Coin Line Up *Enough Money *What's in the Purse *How Much *Practice sheets  *Tag Sale  *Practice sheets *Saxon Lessons – 28, 48, 98, 117 *Use real money to practice identifying and counting money.	Houghton Mifflin p. 149 p. 149 p. 149B p. 151 p. 151 p. 153 p. 153 pp. 149-153 Student workbook pp. 37-39 Practice pp. 37-39 Reteach pp. 37-39 Challenge  *Houghton Mifflin p. 173  p. 173 Student Workbook p. 47 Practice p. 47 Reteach p. 47 Challenge  *Various coins	*Observation *Practice sheets *Chapter test

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark: D. Determine the value of a collection of coins and dollar bills.**

**Content Organizer:** *Number and Number Systems*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
4. Represent and write the value of money using the ¢ sign and in decimal form. When using the \$ sign.	Model showing the use of cent sign and dollar sign.  *Saxon Lesson 93	Houghton Mifflin pp. 153-156, 159-160, 166, 169-170, 531-534  *Examples of \$ and ¢ symbols in newspapers	Observation

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** C. Represent commonly used fractions using words and physical models.

**Content Organizer:** *Number and Number Systems*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
<p>5. Represent fractions (halves, thirds, fourths, sixths and eighths), using words, numerals and physical models.</p> <p>(a) Recognize that a fractional part can mean different amounts depending on the original quantity.</p> <p>(b) Recognize that a fractional part of a rectangle does not have to be shaded with contiguous parts.</p> <p>(c) Identify and illustrate parts of a whole and parts of sets of objects.</p> <p>(d) Compare and order physical models of halves, thirds and fourths in relation to 0 and 1.</p>	<p>*Shady fractions *We're All Equal *Part of a Whole *Practice sheets</p> <p>a) Compare 2 squares of different sizes which have been divided into halves. Discuss how the squares are divided into halves.</p> <p>b)</p> <p>c) * Flowery Fraction Sets *Coin Groups *Parts of a Set *Starts on a Flag *Practice sheets</p> <p>d) Pairs can compare greater or less? Practice sheets</p> <p>*Saxon Lessons – 24, 25, 34, 39, 41, 65</p>	<p>Houghton Mifflin p. 325 p. 327</p> <p>pp. 325 &amp; 327 Student Workbook p. 88-89 Practice, Reteach, and Challenge Workbook</p> <p>pp. 333-336</p> <p>pp. 333-336 Student Workbook pp. 92-93 Practice, Reteach, Challenge Workbook</p> <p>p. 331 student workbook Pg 91 Practice, Reteach, and Challenge Workbook</p> <p>Pattern blocks (24) Construction Paper Shapes (25), (34), (41), (65), Apples (39)</p>	<p>Practice sheets Observation Chapter test</p>



## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** I. Model, represent and explain multiplication as repeated addition, rectangular arrays and skip counting.

**Content Organizer:** *Meaning of Operations*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
7. Model, represent and explain multiplication as repeated addition, and skip counting.	<p>*<u>Eggs in a Nest</u></p> <p>*How Many</p> <p>Practice sheets</p> <p>*CGI</p> <p>*Modeling using other manipulatives</p>	<p>Houghton Mifflin p. 361</p> <p>p. 361 Student Workbook p. 97 Practice, Reteach and Challenge Workbook</p>	<p>*Practice Sheets</p> <p>*Chapter Tests</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** J. Model, represent and explain division as sharing equally, repeated subtraction and rectangular arrays.

**Content Organizer:** *Meaning of Operations*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
8. Model, represent and explain division as sharing equally, and repeated subtraction.	<ul style="list-style-type: none"> <li>*Repeated subtraction using overhead.</li> <li>*Practice sheets</li> <li>*CGI</li> <li>*Saxon Lesson - 132</li> </ul>	Houghton Mifflin p. 387  p. 387 Student Workbook p. 107 Practice, Reteach, and Challenge Workbook Color Tiles	<ul style="list-style-type: none"> <li>*Chapter test</li> <li>*Practice sheets</li> </ul>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** M. Add and subtract two-digit numbers with and without regrouping.

**Content Organizer:** *Meaning of Operations*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
9. Model and use the commutative property for addition.	<ul style="list-style-type: none"> <li>*Line Up</li> <li>*Turn Around</li> <li>*Practice sheets</li> <li>*Practice adding 3 addends</li> <li>*Saxon Lesson 82</li> </ul>	<p>Houghton Mifflin p. 9</p> <p>p. 9-10 Student Workbook p. 1 Practice, Reteach, and Challenge Workbook</p> <p>p. 230</p>	<ul style="list-style-type: none"> <li>*Practice sheets</li> <li>*Chapter test</li> <li>*Performance assessment</li> </ul>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** K. Demonstrate fluency in addition facts with addends through 9 and corresponding subtractions.

**Content Organizer:** *Computation and Estimation*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
10. Demonstrate fluency in addition facts with addends through 9 and corresponding subtractions; e.g., $9 + 9 = 18$ , $18 - 9 = 9$ .	*Fast Facts Practice  *Around the World-flash card game  *Saxon Lessons – 21, 42, 58	Houghton Mifflin pp. 36, 48, 78, 94, 120, 132, 162, 178, 220, 2374, 266, 290, 322, 342, 282, 396, 426, 446, 478, 488, 520, 536, 5710, 584  Fact cards (21), (42), (5) Pennies (58)	Observation  Practice sheets

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:** L. Demonstrate fluency in adding and subtracting multiples of 10, and recognize combinations that make 10.

**Content Organizer:** *Computation and Estimation*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
11. Add and subtract multiples of 10.	<ul style="list-style-type: none"> <li>*Grouping tens</li> <li>*Counting tens</li> <li>*Practice sheets</li>   <li>*Count the tens</li> <li>*Recognizing Tens</li> <li>*Practice sheets</li>   <li>*CGI</li>   <li>*Saxon Lesson - 33</li> </ul>	<p>Houghton Mifflin p. 195 p. 195 Student Workbook p. 49 Practice, Reteach, and Challenge Workbook</p> <p>p. 251</p> <p>p. 251 Student Workbook p. 65 Practice, Reteach, and Challenge Workbook</p> <p>Deck of playing cards (1 deck per four children)</p>	<ul style="list-style-type: none"> <li>*Orally</li>   <li>*Practice pages/observation</li> </ul>



## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students develop number sense; understand number and number systems; understand the meaning of operations and how they relate to one another; and gain fluency in computation and estimation. Students estimate and compute using a variety of strategies including technology-supported methods.

**Benchmark:**

**Content Organizer:** *Computation and Estimation*

<i>Grade Level Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
13. Estimate the results of whole number addition and subtraction problems using front-end estimation; judge the reasonableness of the answers.	<ul style="list-style-type: none"> <li>*Use the number line</li> <li>*Find the Closest Ten</li> <li>*Practice sheets</li> <li>*Find the Number</li> <li>*Move the Counter</li> <li>*Practice sheets</li> </ul>	<p>Houghton Mifflin p. 215 p. 215 Student Workbook p. 58 Practice, Reteach, Challenge Workbook</p> <p>p. 577 Student Workbook p. 156 Practice, Reteach, Challenge Workbook</p> <p>Pg 275 p. 275 Student Workbook Pg 75 Practice, Reteach, Challenge Workbook</p>	<p>Quick check Practice sheets Chapter test Performance Assessment</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard: Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.**  
**Grade Level Indicator: *Measurement Units***

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
1. Identify and select appropriate units of measure for:	a) *Practice sheets	p. 418 Student Workbook p. 113 Practice Workbook	Practice sheets
(a) length – centimeters, meters, inches, feet or yards;	*Saxon Lesson – 105 Centimeters *Saxon Lessons – 56, 94 Feet, Inches	p. 420 Student Workbook p. 114 Practice	Practice sheets
(b) volume – capacity, liters, cups, pints or quarts;	*Saxon Lessons – 59, 62 Cups *Saxon Lessons – 48, 56, 87 Time to half hour	Ruler with centimeter markings Ruler Measuring Cups Individual Clocks	
(c) weight – grams, ounces or pounds;			
(d) time – hours, half-hours, quarter-hours or minutes and time designations, a.m. and p.m.			

## Mathematics – Grade 2

Adams County/Ohio Valley

Course of Study

**Content Standard:** Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.

**Grade Level Indicator:** *Measurement Units*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
2. Establish personal or common referents for units of measure to make estimates and comparisons; e.g., the width of a finger is a cm., a large bottle of soda pop is 2 liters, a small paperclip weighs about a gram.	Saxon Lesson 50		

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.  
**Grade Level Indicator:** *Measurement Units*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
3. Describe and compare the relationships among units of measure such as centimeters and meters; inches, feet and yards; cups, pints and quarts; ounces and pounds; and hours, half-hours, and quarter-hours; e.g., how many inches in a foot?	<u>Cups, pints, and quarts</u> *Modeling Measurement *Practice sheets	p. 433-434 Student Workbook p. 119 Practice, Reteach, Challenge Workbook	Practice sheets Observation

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard: Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.**

**Grade Level Indicator: *Use measurement Techniques and Tools***

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
4. Tell time to the nearest minute interval on digital and to the nearest 5 minute interval on analog (dial) timepieces.	<ul style="list-style-type: none"> <li>*Pick a card</li> <li>*What's The Time</li> <li>*Practice sheets</li>   <li>*Individual Clocks (practice telling time and setting clocks)</li>   <li>* Saxon lessons – 3, 12, 25, 84</li> </ul>	<p>Houghton Mifflin p. 469 Teacher Edition p. 469 Student Workbook p. 127 Practice, Reteach, Challenge Workbook</p> <p>Individual Clocks</p>	<p>Chapter test Practice sheets Observation</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

<b>Content Standard: Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.</b>			
<b>Grade Level Indicator: <i>Use measurement Techniques and Tools</i></b>			
<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
<p>5. Estimate and measure the length and weight of common objects, using metric and U.S. customary units accurate to the nearest unit.</p>	<ul style="list-style-type: none"> <li>*Measure a Step</li> <li>*Use a Ruler</li> <li>*Practice sheets</li>   <li>*Make a Ruler</li> <li>*Guess and measure</li> <li>*Practice sheets</li> <li>*Saxon Lesson 44</li> </ul>	<p>Houghton Mifflin p. 417</p> <p>p. 417-418 Student Workbook p. 113 practice, Reteach, Challenge Workbook</p> <p>p. 419 p. 419-420 Student Workbook p. 114 Practice, Reteach, Challenge Workbook</p> <p>Balance scale, color tiles</p>	<p>Practice sheets Quick check</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard: Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.**

**Grade Level Indicator: *Use measurement Techniques and Tools***

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
6. Select and use appropriate measurement tools; e.g., a ruler to draw a segment 3 inches long, a measuring cup to place 2 cups of rice in a bowl, a scale to weigh 50 grams of candy.	<ul style="list-style-type: none"> <li>*Measure This Way</li> <li>*On the Chart</li> <li>*Practice Sheets</li> </ul>	Houghton Mifflin p. 441  p. 441-442 Student Workbook p. 122 Practice, Reteach, Challenge Workbook	Practice sheets Quick checks

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students estimate and measure to a required degree of accuracy and precision by selecting and using appropriate units, tools and technologies.  
**Grade Level Indicator:** *Use measurement Techniques and Tools*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
7. Make and test predictions about measurements, using different units to measure the same length of volume.	*Compare Units *Line Them Up *Practice sheets	Houghton Mifflin p. 415  p. 415-416 Student Workbook p. 112 Practice, Reteach, Challenge Workbook	Observation Quick check pg. 427 Chapter test

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

<b>Content Standard: Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two-, three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.</b> <b>Grade Level Indicator: <i>Characteristics and Properties</i></b>			
<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
1. Identify, describe, compare and sort three-dimensional objects (i.e., cubes, spheres, prisms, cones, cylinders and pyramids) according to the shape of the faces or the number of faces, edges or vertices.	<ul style="list-style-type: none"> <li>*Describe and classify solid shape</li> <li>*Shape chart</li> <li>*Practice sheets</li> <li>* Saxon Lesson 103</li> </ul>	Houghton Mifflin p. 311 p. 311 Student Workbook p. 83 practice, Reteach, Challenge Workbook  Set of 6 geometric solids (cone, cube, sphere, cylinder, rectangular solid, pyramid)	Observation/oral Performance Assessment

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two-, three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.

**Grade Level Indicator:** *Characteristics and Properties*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
2. Predict what new shapes will be formed by combining or cutting apart existing shapes.	*Triangle shapes *Practice sheets  *Use pattern blocks to make new shapes. Discuss new shape.	Houghton Mifflin p. 315 Teacher’s Edition p. 315 Student Workbook p. 85 Practice, Reteach, Challenge Workbook	Observation Practice sheets  Observation

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

<b>Content Standard: Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two-, three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.</b>			
<b>Grade Level Indicator: <i>Characteristics and Properties</i></b>			
<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
3. Recognize two-dimensional shapes and three-dimensional objects from different positions.	<ul style="list-style-type: none"> <li>*Classify It</li> <li>*A Pattern Path (change position of shapes)</li> <li>*Practice sheets</li>   <li>*Shape chart</li> <li>*Practice sheets</li> </ul>	<p>Houghton Mifflin p. 307</p> <p>p. 307-308 Student Workbook p. 81 Practice, Reteach, Challenge Workbook</p> <p>*p. 311 p. 311-312 Student Workbook Pg 83 Practice, Reteach, Challenge Workbook</p>	<p>Observation</p> <p>Practice sheets</p> <p>Quick check p. 323</p> <p>Chapter Review</p> <p>Chapter Test</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

<b>Content Standard: Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two-, three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.</b> <b>Grade Level Indicator: <i>Spatial Relationships</i></b>			
<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
4. Identify and determine whether two-dimensional shapes are congruent (same shape and size) or similar (same shape different size) by copying or using superposition (lay one thing on top of another).	*Make Congruent Shapes *Dot to Dot *Practice sheets  *Compare similar shapes of different sizes.	Houghton Mifflin pg. 313 Teacher’s Edition p. 313 Student Workbook p. 84 Practice, Reteach, Challenge Workbook	Chapter test Quick check Practice sheets  Observation

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

<b>Content Standard: Students identify, classify, compare and analyze characteristics, properties and relationships of one-, two-, three-dimensional geometric figures and objects. Students use spatial reasoning, properties of geometric objects and transformations to analyze mathematical situations and solve problems.</b> <b>Grade Level Indicator: <i>Transformations and Symmetry</i></b>			
<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
5. Create and identify two-dimensional figures with line symmetry; e.g., what letter shapes, logos, polygons are symmetrical?	*Open Up *Equal parts *Practice sheets	Houghton Mifflin p. 317  p. 317-318 Student Workbook Pg 86 Practice, Reteach, Challenge Workbook	Practice sheets Quick Check Chapter Review Chapter Test

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard: Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.**

**Grade Level Indicator: *Data Collection***

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
1. Pose questions, use observations, interviews and surveys to collect data, and organize data in charts, picture graphs and bar graphs.	<ul style="list-style-type: none"> <li>*Picture Graph</li> <li>*What’s for Lunch</li> <li>*Practice sheets</li>   <li>*Ways to Play</li> <li>*Name Your Game</li> <li>*Practice sheets</li>   <li>*Graph a Show</li> <li>*Leaf Graph</li> <li>*Practice sheets</li>   <li>*Calendar Activities</li>   <li>*Saxon Lessons – 31, 39, 88, 114, 120</li> </ul>	<p>Houghton Mifflin p. 115</p> <p>p. 115 Student Workbook p. 31 Practice, Reteach, Challenge Workbook</p> <p>p. 123</p> <p>p. 123 Student Workbook p. 33 Practice, Reteach, Challenge Workbook</p> <p>p. 125</p> <p>p. 125 Student Workbook p. 34 Practice, Reteach, Challenge Workbook</p>	<ul style="list-style-type: none"> <li>*Chapter Review</li> <li>*Chapter Test</li> <li>*Practice sheets</li>   <li>*Observation</li> </ul>



## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

**Grade Level Indicator:** *Data Collection*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
3. Read and construct simple timelines to sequence events.	<ul style="list-style-type: none"> <li>*Saturday Schedule</li> <li>*Today’s Activities</li> <li>*Practice sheets</li>   <li>*Enrichment</li>   <li>*Create Daily Schedule</li> </ul>	<p>Houghton Mifflin p. 485</p> <p>p. 485-486 Student Workbook</p> <p>p. 133 Practice, Reteach, Challenge Workbook</p> <p>p. 496</p>	<p>Practice sheets</p> <p>Quick check</p> <p>Chapter review</p> <p>Chapter test</p> <p>Performance assessment p. 141</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

**Grade Level Indicator:** *Statistical Methods*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
<p>4. Write a few sentences to describe and compare categories of data represented in a chart or graph, and make statements about the data as a whole.</p>	<ul style="list-style-type: none"> <li>*Picture Graph</li> <li>*What's for Lunch</li> <li>*Ways to Play</li> <li>*Name Your Game</li> <li>*Graph a Show</li> <li>*Leaf Graph</li> <li>*Saxon Lessons – 16, 39, 51, 61, 88, 114, 120, 130</li> <li>*Activities must be extended in order to meet this standard.</li> </ul>	<p>Houghton Mifflin p. 115</p> <p>p. 123</p> <p>p. 125</p>	<p>Student's written work.</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

**Grade Level Indicator:** Statistical Methods

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
5. Identify untrue or inappropriate statements about a given set of data.			

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

**Grade Level Indicator:** *Statistical Methods*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
6. Recognize that data may vary from one population to another; e.g., favorite TV shows of students and of parents.	<ul style="list-style-type: none"> <li>*Money Counts</li> <li>*Travel Tallies</li> <li>*Practice sheets</li> <li>*Saxon Lessons – 31, 88, 130</li> </ul>	Houghton Mifflin p. 113  p. 113-114 Student Workbook p. 30 Practice, Reteach, Challenge Workbook	Practice sheets Chapter review Chapter test

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

<b>Content Standard: Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.</b> <b>Grade Level Indicator: <i>Probability</i></b>			
<i>Indicator</i>	<i>Instructional Activities/Strategies s</i>	<i>Resource</i>	<i>Assessment</i>
7. List some of the possible outcomes of a simple experiment, and predict whether given outcomes are more, less, or equally likely to occur.	*Penny Toss *Penny Predictions *Practice sheets	Houghton Mifflin p. 337  p. 337-338 Student Workbook p.94 Practice, Reteach, Challenge Workbook	Practice sheets Observation Chapter review Chapter test

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students pose questions and collect, organize, represent, interpret and analyze data to answer those questions. Students develop and evaluate inferences, predictions and arguments that are based on data.

**Grade Level Indicator:** *Probability*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
8. Use physical models and/or pictures to represent possible arrangements of 2 to 3 objects.	*Triangle Shapes *Practice Sheets	Houghton Mifflin p. 315 p. 315-316 Student Workbook p. 85 Practice, Reteach, Challenge Workbook	Observation

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.

**Grade Level Indicator:** *Use Patterns, Relations, and Functions*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
<p>1. Extend simple number patterns (both repeating and growing patterns), and create similar patterns using different objects, such as using physical objects or shapes to represent numerical patterns.</p>	<ul style="list-style-type: none"> <li>*Counting Colors</li> <li>*Counting to fill a hundred number chart</li> <li>*Practice sheets</li> <li>*Extend the pattern</li> <li>*Cover up</li> <li>*Practice sheets</li> <li>*Pick a Shape</li> <li>*What's Next</li> <li>*Practice Sheets</li> <li>*Number of shoes</li> <li>*Food for Campers</li> <li>*Saxon</li> </ul>	<p>Houghton Mifflin pp. 83 p. 83 Student Workbook</p> <p>p. 24 Practice, Reteach, Challenge Workbook</p> <p>p. 92 Teacher's Edition *p. 92 Student Workbook *p. 28 Practice, Reteach, Challenge Workbook</p> <p>p. 319 Teacher's Edition p. 319 Student Workbook p. 87 Practice, Reteach, Challenge Workbook</p> <p>p. 517 Teacher's Edition p. 517 Student Workbook p. 140 Practice, Reteach, Challenge Workbook</p>	<p>Chapter Test Practice sheets Observation</p> <p>Chapter Test Practice sheets</p> <p>Practice sheets</p> <p>Calendar/Observation</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.

**Grade Level Indicator:** *Use Patterns, Relations, and Functions*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
<p>2. Use patterns to make generalizations and predictions; e.g., determine a missing element in a pattern.</p>	<p>*Practice Sheets</p> <p>*Extend the Pattern</p> <p>*Cover Up</p> <p>*Practice Sheets</p> <p>*Pick a Shape</p> <p>*What's Next</p>	<p>Houghton Mifflin</p> <p>p. 83 Student Workbook</p> <p>p. 24 Practice Reteach, Challenge</p> <p>p. 91 Teacher's Edition</p> <p>p. 91 &amp; 92 Student Workbook</p> <p>p. 28 Practice, Reteach, Challenge</p> <p>p. 319 Teacher's Edition</p> <p>p. 319-320 Student Workbook</p> <p>p. 87 Practice, Reteach, Challenge</p>	<p>Chapter test</p> <p>Practice sheets</p> <p>Chapter test</p> <p>Practice sheets</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.

**Grade Level Indicator:** *Use Patterns, Relations, and Functions*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
3. Create new patterns with consistent rules or plans, and describe the rule or general plan of existing patterns.	<ul style="list-style-type: none"> <li>*Even or Odd</li> <li>*Counting Colors</li> <li>*Counting to fill a hundred number sheet</li>   <li>*Practice sheets</li>   <li>*Pick a Shape</li> <li>*What's Next</li> <li>*Calendar activities</li> </ul>	<p>Houghton Mifflin pp. 81 Teacher's Edition</p> <p>p. 83 p. 83 Student Workbook</p> <p>p. 319</p>	Observation

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.

**Grade Level Indicator:** *Use Algebraic Representations*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
4. Use objects, pictures, numbers and other symbols to represent a problem situation.	<ul style="list-style-type: none"> <li>*Tell the story</li> <li>*Write About the story</li> <li>*Practice sheets</li>   <li>*Snack Time</li> <li>*Use Coins to Act it Out</li> <li>*Practice sheets</li>   <li>*Create subtraction exercises</li> <li>*Act It Out</li> <li>*Practice sheets</li>   <li>*Food Problems</li> <li>*Picture Power</li>   <li>*Saxon Lessons: 8, 11, 23, 89, 116, 119, 123</li>   <li>*CGI</li> </ul>	<p>Houghton Mifflin pp. 33</p> <p>p. 33 Student Workbook p. 12 Practice, Reteach, Challenge Workbook</p> <p>p. 159</p> <p>p. 160 Student Workbook p. 42 Practice, Reteach, Challenge Workbook</p> <p>p. 263</p> <p>p. 264-265 Student Workbook p. 11 Practice, Reteach, Challenge Workbook</p> <p>p. 379 Teacher's Edition p. 379-381 Student Workbook p. 105 Practice, Reteach, Challenge Workbook</p> <p>*Manipulatives, white boards</p>	<p>Chapter test</p> <p>Practice sheets Observation</p> <p>Observation</p> <p>Chapter test Observation</p> <p>Chapter test Practice sheets</p> <p>*Observation and discussion</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.

**Grade Level Indicator:** *Use Algebraic Representations*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
5. Understand equivalence and extend the concept to situations involving symbols; e.g., $4 + 5 = 9$ and $9 = 4 + 5$ ; and $4 + 5 = 3 + 6 = \triangle + \&..$	<ul style="list-style-type: none"> <li>*Line Up</li> <li>*Turn Around</li> <li>*Practice sheets</li>   <li>*How Many Names for 5?</li> <li>*Practice sheets</li>   <li>*Whole, Part, Part</li> <li>*Facts &amp; More Facts</li> <li>*Practice sheets</li> </ul>	<p>Houghton Mifflin pp. 9</p> <p>p. 9 Student Workbook</p> <p>p. 1 Practice, Reteach, Challenge Workbook</p> <p>p. 41</p> <p>p. 41 Student Workbook</p> <p>p. 43</p> <p>p. 43 Student Workbook</p> <p>p. 15 Practice, Reteach, Challenge Workbook</p>	<p>Practice sheets</p> <p>Chapter review</p> <p>Chapter test</p>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

<b>Content Standard: Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.</b> <b>Grade Level Indicator: <i>Use Algebraic Representations</i></b>			
<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
6. Use symbols to represent unknown quantities and identify values for symbols in an expression or equation using addition and subtraction; e.g., $\square + 0 = 10$ ; $\triangle - 2 = 4$ .	<ul style="list-style-type: none"> <li>*Practice sheets</li> <li>*Whole, Part, Whole</li> <li>*Facts and More Facts</li> <li>*Practice sheets</li> </ul>	Houghton Mifflin p. 27-28 Student Workbook  p. 43  p. 43 Student Workbook p. 15 Practice, Reteach, Challenge Workbook	<ul style="list-style-type: none"> <li>*Observation</li> <li>*Chapter Test</li> <li>*Chapter review p. 51-52</li> <li>*Practice sheets</li> </ul>

## Mathematics – Grade 2

Adams County/Ohio Valley  
Course of Study

**Content Standard:** Students use patterns, relations and functions to model, represent and analyze problem situations that involve variable quantities. Students analyze, model and solve problems using various representations such as tables, graphs and equations.

**Grade Level Indicator:** *Analyze Change*

<i>Indicator</i>	<i>Instructional Activities/Strategies</i>	<i>Resources</i>	<i>Assessment</i>
7. Describe qualitative and quantitative changes especially those involving addition and subtraction; e.g., a student growing taller versus a student growing two inches in one year.			