

# Grade 3 Mathematics – Unit 1: Place Value and Estimation

## Phoenixville Area School District

Stage 1 Desired Results		
	<i>Transfer</i>	
<p><b>PA Core Standards:</b> CC.2.1.3.B.1 Apply place-value understanding and properties of operations to perform multi-digit arithmetic.</p>	<p><b>TRANSFER GOALS</b> <i>Students will be able to independently use their learning to...</i></p> <ul style="list-style-type: none"> <li>Develop a sound foundation to demonstrate the value of numbers by describing their various representations, relationships, and patterns.</li> <li>Interpret mathematical vocabulary and apply proper terminology to engage in meaningful oral and written expression that communicates mathematical thinking, problem-solving methods, and rationale.</li> </ul>	
	<i>Meaning</i>	
<p><b>PSSA Assessment Anchors:</b> M03.B-O.3.1 Use operations, patterns, and estimation strategies to solve problems (may include word problems).</p>	<p><b>UNDERSTANDINGS</b> <i>Students will understand that...</i></p> <ul style="list-style-type: none"> <li>There are many ways to represent a number.</li> <li>Mathematicians use place value concepts to represent amounts.</li> <li>Identifying relationships between numbers helps classify and compare them.</li> <li>Estimation helps determine the reasonableness of an answer.</li> <li>Mathematical situations and structures can be represented and analyzed using symbols to advance algebraic thinking.</li> <li>Patterns exhibit relationships that can be extended, described, and generalized.</li> </ul>	<p><b>ESSENTIAL QUESTIONS</b> <i>Students will keep considering...</i></p> <ul style="list-style-type: none"> <li>What are different ways to represent a number?</li> <li>How do I demonstrate the relationship among numbers, quantities, and place value for whole numbers?</li> <li>How can I use models, words, and expanded forms to order and compare numbers?</li> <li>When is estimation more appropriate than finding an exact answer?</li> <li>How do we use symbols to create mathematical meaning?</li> <li>Where in the real-world do I find patterns?</li> </ul>

**Knowledge and Skills Acquisition**

**KNOWLEDGE**

*Students will know...*

- Base-ten blocks can be used to count, read and write numbers
- Digits are combined to create numbers up to 10,000
- Digits are either odd or even
- Patterns can be found when counting
- Numbers can be represented in different forms
- Place value can be used to compare numbers
- Symbols are used to show comparisons
- Rounding numbers allows us to estimate a reasonable answer

**VOCABULARY**

- Word / Standard / Expanded Form
- Place Value
- Digit / Odd / Even
- Greater Than / Less Than
- Greatest / Least
- Rounded / Rounding
- Reasonable
- Actual / Exact
- Estimate / About

**SKILLS**

*Students will be skilled at...*

- Building a number (up to 1,000) with base-ten blocks and reading and or writing the number in standard, expanded or word form.
- Reading and writing numbers up to 10,000.
- Identifying odd and even numbers verbally and with selected responses.
- Recognizing patterns in numbers verbally and in opened-ended tasks.
- Identifying the importance of place value when comparing numbers verbally, in selected responses and in open-ended tasks.
- Using appropriate symbols to show the comparison of numbers in selected response tasks.
- Rounding numbers to find a reasonable answer in selected responses and open-ended tasks.

## Stage 2 – Evidence

Code A/M/T	Evaluative Criteria	Assessment Evidence	
A/M/T  Acquisition  Meaning Making  Transfer	<i>What criteria will be used in each assessment to evaluate attainment of the desired results?</i>	<p><b>PERFORMANCE TASK(S)</b> <i>Students will demonstrate understanding (meaning-making and transfer) through complex performance by...</i></p> <p><b>Performance Assessment Unit 1</b> Students will read, write, round and compare numbers to complete a performance based assessment.</p> <ul style="list-style-type: none"> <li>• <b><i>NO Performance Task for This Unit</i></b></li> </ul>	<p>Differentiation Considerations:</p>
A/M/T  Acquisition  Meaning Making  Transfer	<i>What criteria will be used in each assessment to evaluate attainment of the desired results?</i>	<p><b>OTHER EVIDENCE</b></p> <ul style="list-style-type: none"> <li>• Math in Focus 2020 Chapter Test 1</li> <li>• Math in Focus 2020 Chapter 1 Performance Task</li> <li>• Teacher Observation</li> <li>• Teacher Made Quizzes</li> <li>• Small Group Work</li> </ul>	<p>Differentiation Considerations:</p> <p>Small Group – reteaching</p> <p>Enrichment – Put on Your Thinking Cap, Math Journal</p>