# Grade 1 Mathematics – Unit 3: Number Sense to 40 Phoenixville Area School District

	Stage 1 Desired Res	ults		
PA Core Standards:	Transfer			
cc.2.1.1.B.2 Use place-value concepts to represent amounts of tens and ones and to compare two-digit numbers.  cc.2.1.1.B.3 Use place-value concepts and properties of operations to add and subtract	<ul> <li>TRANSFER GOALS         Students will be able to independently use their learning to         • Number Sense: Develop a sound foundation to demonstrate the value of numbers by describing their various representations, relationships, and patterns.         • Fluency: Demonstrate automatic recall of addition, subtraction, multiplication, and division facts.         • Problem-Solving: Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems.     </li> <li>Mathematical Vocabulary: 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>			
within 100.	Meaning			
CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.  PSSA Assessment	<ul> <li>UNDERSTANDINGS         Students will understand that         • There are many ways to represent a number.         • Identifying relationships between numbers helps classify and compare them.     </li> <li>Operations and numerical properties increase computational fluency.</li> <li>Depending on the situation, problems may be solved using a variety of tools and strategies.</li> </ul>	<ul> <li>ESSENTIAL QUESTIONS Students will keep considering  <ul> <li>What are the different ways to represent a number?</li> <li>How can I use models and words/expanded form to order and compare numbers?</li> </ul> </li> <li>How are the basic operations related to one another?</li> <li>What information and strategies do I use to solve this problem? What is the right tool for the job?</li> </ul>		
Anchors: [Add anchors]				
	Knowledge and Skills Acquisition			
	KNOWLEDGE	SKILLS		
	Students will know	Students will be skilled at		

- Numbers to 40
- Compare numbers to 40
- Place-value
- Addition and Subtraction strategies
- Regrouping
- Addition and Subtraction sentences and real-world word problems

#### **VOCABULARY**

- thirty
- Forty
- Sequence
- tens
- ones
- Place-value
- Doubles
- Doubles plus 1
- Balanced equation

## Counting

- Reading and writing numbers up to 40 in word, numerical, and expanded form.
- Counting from 0 to 40 from any starting point, forwards and backwards, orally or in writing (including, one less/one more, count on to add, count pictures/objects, and base ten blocks).
- Comparing numbers 0 to 40, using the terms more than, less than, and equal to.
- Making and extending number patterns with numerals 0-40.

### Place-Value

- Using a place-value chart (base ten blocks, drawing, numerals) to represent numbers to 40
- Identifying place-value of numbers in oneand two-digit numbers.

## **Addition and Subtraction**

- Using pictures to tell addition and subtraction stories in verbal and written forms.
- Writing and solving addition and subtraction sentences and real-world word problems, using concepts of place-value.
- Balance addition and subtraction equations

Stage 2 – Evidence				
Code A/M/T	Evaluative Criteria	Assessment Evidence		
А	What criteria will be used in each	Unit 3 Test Part 1: Number Sense with Numbers 11 to 40 Combination of multiple choice and fill in the blank questions.	Differentiation Considerations:	
	assessment to evaluate attainment of the desired results?	<ul> <li>Count groups of tens and ones and select number in numeral and word form</li> <li>Extend counting sequence</li> <li>Identify 10 more/10less than a number</li> <li>Solve number sentences adding 10 more to a number or subtracting 10 from a number</li> <li>Given a number in word form, write the numeral</li> <li>Write numbers in tens and ones (expanded form)</li> <li>Identify and show tens and ones within a number.</li> <li>Find missing numbers in a counting sequence</li> <li>Identify numbers that are more than a given number and less than a given number.</li> </ul>	[Work on this section after completing Stages 1-2 of all units]	
Α		Unit 3 Test Part 2: Addition and Subtraction within 40 Combination of multiple choice and fill in the blank questions.	Differentiation Considerations:	
		<ul> <li>Given a picture, identify matching number sentence</li> <li>Add and subtract with and without regrouping</li> <li>Solve real world story problems and write matching number sentence used to find answer</li> <li>Solve a number sentence and find a related fact using opposite operation</li> </ul>	[Work on this section after completing Stages 1-2 of all units]	