## Curriculum Map

Course Title: Math
Grade: $\underline{5}^{\text {th }}$

| Unit (Name/Number): Algebraic Concepts | Pacing: Refer to RCC Pacing Guide (Unit 3 by mid-February) |
| :--- | :--- |
| Essential Question(s): How do you write and interpret numerical expressions? How can you analyze patterns and relationships? |  |


| Content/Key Concepts (Eligible Content) | Standards | Key Vocabulary | Learning Activities/Resources | Evidence of Learning <br> (Assessments; Performance Tasks) |
| :---: | :---: | :---: | :---: | :---: |
| INTERPRET AND EVALUATE NUMERICAL EXPRESSIONS USING ORDER OF OPERATIONS. <br> M05.B-O.1.1.1 Use multiple grouping symbols (parentheses, brackets, or braces) in numerical expressions and evaluate expressions containing these symbols. <br> M05.B-O.1.1.2 Write simple expressions that model calculations with numbers and interpret numerical expressions without evaluating them. Example 1: Express the calculation "add 8 and 7 , then multiply by 2 " as $2 \times(8+7)$. Example 2 : Recognize that $3 \times(18,932+921)$ is three times as large as $18,932+921$ without having to calculate the indicated sum or product. <br> ANALYZE PATTERNS AND RELATIONSHIPS USING TWO RULES. <br> M05.B-O.2.1.1 Generate two numerical patterns using two given rules. Example: Given the rule "add 3" and the starting number 0 and given the rule "add 6 " and the starting number 0 , generate terms in the resulting sequences. | $\begin{gathered} \hline \text { Common Core } \\ \text { 5.OA.1,5.OA.2, } \\ \text { 5.OA.3 } \\ \text { PA Core } \\ \text { Ctandards } \\ \text { CC.2.2.5.A.1, } \\ \text { CC.2.2.5.A. } 4 \end{gathered}$ | - evaluate <br> - equation <br> - numerical expression <br> - grouping symbols <br> - parentheses <br> - brackets <br> - braces <br> - corresponding terms <br> - ordered pair <br> - relationship <br> - horizontal axis (x) <br> - vertical axis (y) | Lesson 19: Evaluate and Write Expressions (M) <br> Sample Assessment Questions <br> SAS Materials/Resources <br> Calculator use at teacher's discretion <br> Lesson 19: Evaluate and Write Expressions (M) <br> Sample Assessment Questions SAS Materials/Resources <br> Calculator use at teacher's discretion <br> Lesson 20: Analyze Patterns and Relationships (M) <br> Sample Assessment Questions SAS Materials/Resources <br> Calculator use at teacher's discretion | Assessment Options: <br> RCC Quizzes <br> RCC Interim Assessment <br> SAS Assessment Builder <br> Required Assessment: <br> RCC Unit 3 Assessment <br> Extension Activity: <br> RCC Math in Action <br> Math Practice Standards <br> Evaluate and Write <br> Expressions-1, 2, 3, 4, 5, 7 <br> Analyze Patterns and Relationships-2, 3, 4, 5, 7 |

M05.B-O.2.1.2 Identify apparent relationships between corresponding terms of two patterns with the same starting numbers that follow different rules. Example: Given two patterns in which the first pattern follows the rule "add 8" and the second pattern follows the rule "add 2 ," observe that the terms in the first pattern are 4 times the size of the terms in the second pattern.

Lesson 20: Analyze Patterns and
Relationships (M)
Sample Assessment Questions
SAS Materials/Resources
Calculator use at teacher's discretion
$M=$ lessons that have a major emphasis in the Common Core Standards
$S / A=$ lessons that have supporting/additional emphasis in the Common Core Standards

## Math Practice Standards:

1- Make sense of problems and persevere in solving them
2- Reason abstractly and quantitatively
3- Construct viable arguments and critique the reasoning of others
4- Model with mathematics

5- Use appropriate tools strategically
6- Attend to precision
7- Look for and make use of structure
8- Look for and express regularity in repeated reasoning

