Mathematics Learning Plan- Grade 3

Student Name: Jane Doe   Estimated hours per week: 4   Start Date: 8 /31 /11 End Date: 12/14 /11

Monthly Review Day / Time: Third Tuesday of each month   HQT Teacher: Ms. Elementary Teacher

Weekly Contact: Tuesdays   On-campus times: 1:30-2:30pm   Certificated Teacher at study block: Mr. or Ms. Elementary Teacher

Curriculum: Math Connects, McGraw and Hill   online support: Math Connects, McGraw and Hill   web link: http://www.mhschool.com/math/mathconnects/grade 3

Course Description with Learning Goals: In Grade 3, math focuses on four critical areas: (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

Course Model: This is an "outcome-based" course. The student will need to pass each chapter by at least 80% accuracy as measured on the chapter test. The learning targets for each chapter are outlined below. The student has choice in the learning methods to reach understanding of the materials. The daily work is completed off-campus. During your on-campus time, you will have a one-on-one meeting with your teacher/advisor to support your learning. All curriculum and instructional materials needed to complete the course are available at school for check out or to use on campus. Student provided materials include: notebook, lined and grid paper, pencils, colored pencils, calculator and ruler.

To build understanding of each learning target, the student will:
1. Read and review examples for each unit.
2. Select and solve either evens or odds problems for each practice set for each unit, self-check and correct answers.
3. Complete "self-checks" from text for self –assessment of progress or complete the diagnostic tools from the MC web link for each chapter.
4. Keep a notebook of all work to share at monthly advisor meetings.
5. Design any projects and resources that can increase understanding and integrate with other subjects. (This is an optional activity to increase understanding and provide connections to other subjects.)

At your monthly teacher meetings, the student will:
6. Share their notebook of completed work.
7. Complete the end of chapter assessments at 80% or better level. If score is below 80 %, use on-line practice activities, projects or workbooks to further understand the learning targets until 80% is reached. (Students are welcome to complete these assessments during the weekly study block times.)
8. Review the learning targets for the next month and update learning plan.

9. Determine if satisfactory progress has been made on your learning plan.

Month	Learning Targets:	Assessments	Monthly Summary:
September	Chapter 1: Use Place Values to Communicate: What is the place value of a digit in a number? GLE 3. (2 weeks) 1 Learning Targets: 1.1- Find patterns in numbers 1.2- Four step plan to solve problems 1.3- Use models to explore place value through 1000 1.4- Read, write and identify place value of whole numbers through thousands 1.5- Use the four-step plan to solve problems 1.6- Compare numbers through ten thousand 1.7- Use a number line and place value to order numbers through ten thousands 1.8, 1.9 Round numbers to nearest ten and hundred 1.10- Find the value of coins and bills Chapter 2: Add to Solve Problems GLE 3.1 (2 weeks) Learning Targets: 2.1- Use addition properties to add whole numbers 2.2- Decide whether an estimate or an exact answer is needed to solve a problem 2.3- Estimate sums using rounding and compatible numbers 2.4- Regrouping ones to add two-digit numbers 2.5- Add money as dollars or cents 2.6- Choose the best strategy to solve a problem 2.7- Use models to explore adding three-digit numbers ,Add three-digit numbers and use estimation to check for reasonableness 2.8- Add three and four digit numbers with regrouping	Diagnostic: Complete the readiness quiz for each chapter at camcillianmh.com Formative: Complete the "Check what you know" as you complete each chapter. Summative: Chapter test Score: Chapter 1 _____ Chapter 2 _____ Optional: Cumulative test Test Practice	Satisfactory Progress, comments: Concern about progress, adjustments made to stay on track: Lack of satisfactory progress, Intervention plan attached: Date of meeting:

October	Chapter 3; Subtract to Solve Problems Learning targets (two weeks) GLE 3.1 3.1- Subtract two-digit numbers 3.2- Estimate differences using rounding 3.3- Subtract money 3.4- Decide whether an answer to a problem is reasonable 3.5- Model subtraction with regrouping 3.6- Choose the best strategy to solve problems 3.7- Learn to subtract thee and four digit numbers 3.8- Model subtraction across zeros 3.9- Select addition or subtraction to solve problems Chapter 4: Develop Multiplication Concepts and Facts (two weeks) GLE 3.2 Learning Targets: 4.1- Use models to explore multiplication ,Use array to multiple 4.2- Multiply by 2, use technology to multiple 4.3-- Multiply by 4 4.4- Solve a problem by identifying extra or missing information 4.5- Multiple by 5 4.6- Multiple by 10 4.7- Chose the best strategy to solve a problem 4.8- Multiply by 0 and 1	Diagnostic: Complete the readiness quiz for each chapter at camcillianmh.com Results: Formative: Complete the "Check what you know as you complete each chapter. Results: Summative: Chapter test 3 _____ Chapter test 4 _____ Optional: Cumulative test Test Practice	Satisfactory Progress, comments: Concern about progress, adjustments made to stay on track: Lack of satisfactory progress, Intervention plan attached: Date of meeting:
November	Chapter 5:Develop More Multiplication Facts (two weeks) GLE 3.2 Learning Targets: 5.1- Explore the multiplication table, Multiply by 3 5.2- Multiple by 6 5.3- Solve a problem by looking for a pattern 5.4- Multiple by 7 5.5- Multiple by 8 5.6- Multiple by 9 5.7—Choose the best strategy to solve a problem 5.8- Multiple by 11 and 12 5.9- Identify and use the associative property of multiplication	Diagnostic: Complete the readiness quiz for each chapter at camcillianmh.com Results: Formative: Complete the "Check what you know as you complete each chapter. Results:	Satisfactory Progress, comments:

			Concern about progress, adjustments made to stay on track:
	Chapter 6: Develop Division Concepts and Facts (two weeks) GLE 3.2 6.1- Explore the meaning of division, use models to relative division to subtraction 6.2- Relate division to multiplication, Divide using related multiplication facts 6.3- Choose an operation to solve a problem 6.4- Use models to divide by 2, use technology to divide 6.5- Use models to divide by 5 6.6- Choose the best strategy to solve a problem 6.7- Use models to divide by 10 6.8- Use division rules to divide by 0 and 1	Summative: Chapter test 5: _____ Chapter test 6:_____ Optional: Cumulative test Test Practice	Lack of satisfactory progress, Intervention plan attached: Date of meeting:
December	Chapter 7: Develop More Division Facts (two weeks) GLE 3.2 Learning Targets: 7.1- Use counters to model division, use models and related multiplication facts to divide by 3 7.2- Use models and related multiplication facts to divide by 4 7.3- Solve a problem by making a table 7.4- Use an array and repeated subtraction to divide by 6 and 7 7.5- Learn to divide by 8 and 9 7.6- Use models to divide by 11 and 12 7.7- Choose the best strategy to solve a problems	Diagnostic: Complete the readiness quiz for each chapter at camcillianmh.com Results: Formative: Complete the "Check what you know as you complete each chapter. Results: Summative: Chapter test 7 _____ Optional: Cumulative test Test Practice	Satisfactory Progress, comments: Concern about progress, adjustments made to stay on track: : Lack of satisfactory progress, Intervention plan attached:

		Date of meeting:

Resources:

Common Core Standards in Math: http://www.corestandards.org/the-standards/mathematicss the learning standards

Washington State Grade Level Expectations in Math: http://www.k12.wa.us/Mathematics/Standards.aspx

Common Core Standards: Grade 3 Overview,

- **Operations and Algebraic Thinking**
  - Represent and solve problems involving multiplication and division.
  - Understand properties of multiplication and the relationship between multiplication and division.
  - Multiply and divide within 100.
  - Solve problems involving the four operations, and identify and explain patterns in arithmetic.

- **Number and Operations in Base Ten**
  - Use place value understanding and properties of operations to perform multi-digit arithmetic.

- **Number and Operations—Fractions**
  - Develop understanding of fractions as numbers.

- **Measurement and Data**
  - Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
  - Represent and interpret data.
  - Geometric measurement: understand concepts of area and relate area to multiplication and to addition.
  - Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

- **Geometry**
  - Reason with shapes and their attributes.

- **Mathematical Practices**

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.