Math Curriculum Mapping   **Ashley Olsen**   **Grade 5**

Unit 1: Fluency with Whole Numbers and Decimals Chapters: 1-5	**Time:** September-December

Standards Taught	

- 5.OA.A.1
- 5.OA.A.2
- 5.NBT.A.1
- 5.NBT.A.2
- 5.NBT.A.3a
- 5.NBT.A.3b
- 5.NBT.A.4
- 5.NBT.B.5
- 5.NBT.B.6
- 5.NBT.B.7
- 5.NF.B.3

Differentiation/Assessment:	**Classroom Management and Environment:**	**What will the students be doing?**
Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.	*Our classroom is set up with each student having their own desk with whole group discussion. There is collaboration in groups during Daily Math Centers.*	*To practice the various math skills students will complete:* • Enrichment Activities • Reteach Activities • Grab & Go Centers Kit ● Teacher-made games ● Chapter Literature ● Chapter Activity Cards ● iPads Laptops ● Mega Math online games ● Soar to Success ● Teacher projects ● GoMath Tiered RTI activities
Relevance	**Vocabulary**	**Assessments**
Students will apply place value knowledge to understand numbers and their value. This is applicable to Science concepts when converting unit of measure and evaluating number comparisons.	- Base - Distributive property - Evaluate - Exponent - Inverse operations - Numerical expression - Order of operations - Period - Compatible number - Dividend - Divisor - Estimate	***Daily Workbook Sheets, Class Discussion, Teacher Observation, Math Journals, Chapter Tests, Math Centers, Fact Fluency Tests***

| | - *Factor*
- *Partial quotients*
- *Product*
- *Quotient*
- *Sequence*
- *Term*
- *Thousandth*
- *Place value*
- *Decimal*
- *Expanded form*
- *Standard form*
- *Equivalent fractions* | |

Essential Questions:
- How can you use place value, multiplication, and expressions to represent and solve problems?
- How can you divide whole numbers?
- How can you add and subtract decimals?
- How can you solve decimal multiplication problems?
- How can you solve decimal division problems?

At completion of the unit, students will be able to:
- Recognize the 10 to 1 relationship among place-value positions.
- Read and write whole numbers through hundred million.
- Write and evaluate repeated factors in exponent form.
- Multiply by 1- and 2-digit numbers using properties and a standard algorithm.
- Use multiplication to solve division problems.
- Use the strategy solve a simpler problem to solve problems.
- Write numerical expressions and evaluate numerical expressions using order of operations.
- Divide 3- and 4-digit dividends by 1-digit divisors using a variety of strategies.
- Divide by 2-digit divisors using base-ten blocks, place value, and other strategies.
- Estimate quotients using compatible numbers.
- Solve division problems and decide when to write a remainder as a fraction.
- Solve problems by using the strategy draw a diagram
- Model, read, and write decimals to thousandths.
- Compare and order decimals to thousandths using place value.
- Round decimals to any place.
- Add and subtract decimals using base-ten blocks and place value.
- Make reasonable estimates of decimal sums and differences.
- Identify, describe, and create numerical patterns with decimals.
- Solve problems using the strategy make a table.
- Multiply a decimal and a whole number using drawings and place value.
- Solve problems using the strategy draw a diagram to multiply money.
- Multiply decimals using drawings and place value.
- Estimate decimal quotients.
- Divide decimals by whole numbers using drawings and place value.
- Model division by decimals using drawings and place value.
- Solve multistep decimal problems using the strategy work backward.

Unit 2: Operations with Fractions	Time: January-March
Chapters 6-8	

Standards Taught
● 5.NF.A.1   ● 5.NF.A.2   ● 5.NF.B.3   ● 5.NF.B.4a   ● 5.NF.B.4b   ● 5.NF.B.5a   ● 5.NF.B.5b   ● 5.NF.B.6   ● 5.NF.B.7a   ● 5.NF.B.7b   ● 5.NF.B.7c

Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.	*Our classroom is set up with each student having their own desk with whole group discussion. There is collaboration in groups during Daily Math Centers.*	*To practice the various math skills students will complete:* ● Enrichment Activities ● Reteach Activities ● Grab & Go Centers Kit ● Teacher-made games ● Chapter Literature ● Chapter Activity Cards ● iPads Laptops ● Mega Math online games ● Soar to Success ● Teacher projects ● GoMath Tiered RTI activities

Relevance	Vocabulary	Assessments
Students use their understanding of how division procedures work using the properties and base ten modeling. Fluency with multi-digit addition, subtraction, and multiplication is completed. Students connect decimal numbers and fractions to deepen understanding.	- *Mixed number* - *Common denominator* - *Numerator* - *Denominator* - *Dividend* - *Divisor* - *Fraction* - *Quotient* - *Least common*	***Daily Workbook Sheets, Class Discussion, Teacher Observation, Math Journals, Chapter Tests, Math Centers, Fact Fluency Tests***

Essential Questions:
- How can you add and subtract fractions with unlike denominators?
- How do you multiply fractions?
- What strategies can you use to solve division problems involving fractions?

At completion of the unit, students will be able to:

Add fractions with unlike denominators using models, drawings, properties, and equivalent fractions.
- Subtract fractions with unlike denominators using models, drawings, and equivalent fractions.
- Make reasonable estimates of fraction sums and differences.
- Add and subtract mixed numbers with unlike denominators.
- Identify, describe, and create numerical patterns with fractions.
- Solve problems using the strategy work backward.
- Model to find the fractional part of a group.
- Multiply fractions and whole numbers using models, drawings, and other strategies.
- Multiply fractions using models, drawings, and other strategies.
- Multiply mixed numbers using drawings and other strategies.
- Relate the size of the product compared to the size of one factor when multiplying fractions less than one and greater than one.
- Solve problems using the strategy guess, check, and revise.
- Divide a whole number by a fraction and divide a fraction by a whole number using models, drawings, and other strategies.
- Solve problems using the strategy draw a diagram.
- Interpret a fraction as division and solve whole number division problems that result in a fraction or mixed number.
- Represent division by drawing diagrams and writing story problems and equations.

Unit 3: Geometry and Measurement Chapters: 9-11	**Time:** End March-May
Standards Taught	

- 5.OA.B.3
- 5.MD.B.2
- 5.G.A.1
- 5.G.A.2
- 5.MD.A.1
- 5.MD.C.3
- 5.MD.C.3a
- 5.MD.C.3b
- 5.MD.C.4
- 5.MD.C.5a
- 5.MD.C.5b
- 5.MD.C.5c
- 5.G.B.3
- 5.G.B.4

Differentiation/Assessment:	Classroom Management and Environment:	What will the students be doing?
Students who need extra help will receive guidance from our Title teacher or aides. If appropriate, they will take their tests or complete worksheets in an alternative setting.	*Our classroom is set up with each student having their own desk with whole group discussion. There is collaboration in groups during Daily Math Centers.*	*To practice the various math skills students will complete:* • Enrichment Activities • Reteach Activities • Grab & Go Centers Kit ● Teacher-made games ● Chapter Literature ● Chapter Activity Cards ● iPads Laptops ● Mega Math online games ● Soar to Success ● Teacher projects ● GoMath Tiered RTI activities
Relevance	**Vocabulary**	**Assessments**
Students will apply place value knowledge to understand numbers and their value. This is applicable to Science concepts when converting unit of measure and evaluating number comparisons.	- *Data* - *line plot* - *Interval* - *Line graph* - *Ordered pair* - *Origin* - *Scale* - *X axis* - *Y axis* - *Decimeter* - *Gallon* - *Gram* - *Length* - *Liter* - *Mass* - *Meter* - *Mile* - *Milligram* - *Millimeter* - *Pound* - *Ounce* - *Ton* - *Weight* - *Capacity* - *Decameter* - *Acute* - *Obtuse*	***Daily Workbook Sheets, Class Discussion, Teacher Observation, Math Journals, Chapter Tests, Math Centers, Fact Fluency Tests***

5th

	- *Equilateral*
	- *Isosceles*
	- *Right triangle*
	- *Right triangle*
	- *Parallelogram*
	- *Quadrilateral*
	- *Scalene*
	- *Trapezoid*
	- *Base*
	- *Congruent*
	- *Heptagon*
	- *Lateral face*
	- *Nonagon*
	- *Polygon*
	- *Polyhedron*
	- *Prism*
	- *Pyramid*
	- *Unit cube*
	- *Volume*

Essential Questions:
- How can you use line plots, coordinate grids, and patterns to help you graph and interpret data?
- What strategies can you use to compare and convert measurements?
- How do unit cubes help you build solid figures and understand the volume of a rectangular prism?

At the end of the unit, students will be able to:
- Make and use line plots with fractions to solve problems.
- Graph and name points on a coordinate grid using ordered pairs.
- Analyze and display data in a line graph.
- Use two rules to generate a numerical pattern and identify the relationship between the corresponding terms in the patterns.
- Solve problems using the strategy solve a simpler problem.
- Graph the relationship between two numerical patterns on a coordinate grid.
- Compare, contrast, and convert customary units of length, capacity, and weight.
- Convert measurement units to solve multistep problems.
- Compare, contrast, and convert metric units.
- Solve problems about customary and metric conversions using the strategy make a table.
- Convert units of time to solve elapsed time problems.
- Classify and compare polygons, triangles, and quadrilaterals using their properties.
- Solve problems using the strategy act it out and make a table.
- Identify, describe, and classify three dimensional figures.
- Understand unit cubes and how they can be used to build a solid figure.
- Estimate volume of a rectangular prism and find the volume of a rectangular prism by