

Unit 3 (Ch 9 & 11-14)

Content Area: **Mathematics**
Course(s): **Mathematics 4**
Time Period: **March**
Length: **61 days (including 2 days for iReady testing)**
Status: **Published**

Unit #3 Overview

The students will be working on:

Multiply Fractions and Whole Numbers

Understand Measurement Equivalence

Use Perimeter and Area Formulas

Identify and Draw Lines and Angles

Identify Symmetry and Two-Dimensional Shapes

Priority Standards

MATH.4.OA.A.3	Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
MATH.4.NF.B.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
MATH.4.NF.B.4.a	Understand a fraction a/b as a multiple of $1/b$.
MATH.4.NF.B.4.b	Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number.
MATH.4.NF.B.4.c	Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.
MATH.4.M.A.1	Know relative sizes of measurement units within one system of units including km, m, cm, mm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.
MATH.4.M.A.2	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams

	such as number line diagrams that feature a measurement scale.
MATH.4.M.A.3	Apply the area and perimeter formulas for rectangles in real world and mathematical problems.
MATH.4.M.B.4.a	An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ th of a circle is called a “one-degree angle,” and can be used to measure angles.
MATH.4.M.B.4.b	An angle that turns through n one-degree angles is said to have an angle measure of n degrees.
MATH.4.M.B.5	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
MATH.4.M.B.6	Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.
MATH.4.DL.B.5	Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots.
MATH.4.G.A.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
MATH.4.G.A.2	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category and identify right triangles.
MATH.4.G.A.3	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Learning Targets

- Lesson 11-1: I can write lengths using equivalent metric measures.
- Lesson 11-2: I can write masses and capacities using equivalent metric measures.
- Lesson 11-3: I can write lengths using equivalent customary measures.
- Lesson 11-4: I can write weights using equivalent customary measures.
- Lesson 11-5: I can write capacities using equivalent customary measures.
- Lesson 11-6: I can make line plots and use them to solve problems.
- Lesson 11-7: I can write amounts of time using equivalent measures.
- Lesson 11-8: I can solve multi-step word problems involving elapsed time.
- Lesson 11-9: I can add and subtract mixed measures.
- Lesson 12-1: I can use a formula to find the perimeter of a rectangle.
- Lesson 12-2: I can use a formula to find the area of a rectangle.
- Lesson 12-3: I can find unknown measures of rectangles.
- Lesson 12-4: I can solve multi-step word problems involving perimeter or area.
- Lesson 13-1: I can identify and draw points, lines, line segments, and rays.
- Lesson 13-2: I can identify and draw angles.

- Lesson 13-3: I can identify and draw intersecting lines, parallel lines, and perpendicular lines.
- Lesson 13-4: I can measure angles using degrees.
- Lesson 13-5: I can find the measures of angles.
- Lesson 13-6: I can measure and draw angles.
- Lesson 13-7: I can find the measure of an angle using its parts.
- Lesson 13-8: I can find the measures of unknown angles.
- Lesson 14-1: I can identify shapes that have line symmetry.
- Lesson 14-2: I can draw symmetric shapes.
- Lesson 14-3: I can classify triangles by their sides.
- Lesson 14-4: I can classify triangles by their angles.
- Lesson 14-5: I can classify quadrilaterals.
- Lesson 9-1: I can write fractions as multiples of unit fractions.
- Lesson 9-2: I can write multiples of fractions as multiples of unit fractions.
- Lesson 9-3: I can multiply whole numbers and fractions.
- Lesson 9-4: I can multiply whole numbers and mixed numbers.
- Lesson 9-5: I can solve multi-step word problems involving fractions and mixed numbers.

Essential Questions

- How are different ideas about geometry connected?
- How are fractions and decimals related?
- How can conversion of measurements help me solve real-world problems?
- Why do we convert measurements?
- Why is it important to measure perimeter and area?

Materials and Resources

- Big Ideas Online digital platform
- Big Ideas Workbook Volume 2
- Exit Tickets
- Foldables
- Hands-On Manipulatives
- iReady platform 40 minutes/week with individual paths for each student
- Problem of the Day (Printable)
- Visual Vocabulary Flashcards
- Weekly Calendar

Unit Assessments (Required)

- Big Ideas Chapter 10 Assessment Form B
- Big Ideas Chapter 11 Assessment Form B
- Big Ideas Chapter 12 Assessment Form B
- Big Ideas Chapter 13 Assessment Form B
- Big Ideas Chapter 14 Assessment Form B
- Big Ideas Chapter 9 Assessment Form B

Unit Assessments (Optional)

- Big Ideas Chapter Assessment Form A
- Big Ideas Created Assessment: Course Benchmark # 3 (for use after Chapter 14)
- Big Ideas Created Assessment: Post-Course Benchmark (end of year)
- Journal Writing
- Standardized Test Practice (NJSLA released items/iReady platform)

Learning Plan

Time Frame	Big Ideas	NJSLA Priority Standard	Learning Goals	Learning Targets	Lesson/Activities
Chapter 9 (11 days)	Chapter 9: Lesson 1	4.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. 4.NF.B.4a Understand a fraction a/b as a multiple of $1/b$.	<ul style="list-style-type: none"> • Write a fraction as a sum of unit fractions. • Use multiplication to rewrite a sum of unit fractions. • Write a fraction as a multiple of a unit fraction. 	I can write fractions as multiples of unit fractions.	<ul style="list-style-type: none"> -Chapter Opener -Whole Group Lesson -Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform) -See Strategies for Differentiating Instruction to utilize during Math Centers -See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice,

Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40

4.NF.B.4

Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

- Write a fraction as a multiple of a unit fraction.

- Write a multiple of a fraction as a multiple of a unit fraction.

- Find the product of a whole number and a unit fraction.

I can write multiples of fractions as multiples of unit fractions.

Chapter 9 (11 days)
Chapter 9: Lesson 2
4.NF.B.4b Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number.

4.NF.B.4c

Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.

minutes/week
 -Whole Group Lesson
 -Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

4.NF.B.4

Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

- Write a multiple of a fraction as a multiple of a unit fraction.

-See Strategies for Differentiating Instruction to utilize during Math Centers

Chapter 9: (11 days) Chapter 9: Lesson 3
 4.NF.B.4b Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number.

- Use a rule to find the product of a whole number and a fraction.

I can multiply whole numbers and fractions.

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

4.NF.B.4c

Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.

- Explain why the rule used to multiply a whole number and a fraction makes sense.

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

4.NF.B.4

Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

- Write a mixed number as a fraction to multiply.

-Whole Group Lesson

Chapter 9: (11 days) Chapter 9: Lesson 4
 4.NF.B.4b Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number.

- Use the Distributive Property to multiply.

I can multiply whole numbers and mixed numbers.

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online

- Find the product

4.NF.B.4c

Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.

of a whole number and a mixed number.

platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

4.NF.B.4

Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

Chapter 9 (11 days) Chapter 9: Lesson 5

4.NF.B.4b Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number.

4.NF.B.4c

Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.

- Understand a problem.
- Make a plan to solve.
- Solve a problem using an equation.

I can solve multi-step word problems involving fractions and mixed numbers.

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills &

Vocab,
Prerequisite
Skills, Extra
Practice,
Reteach, Enrich
and Extend
Activities

-Homework by
lessons may be
assigned via the
workbook or
through the Big
Ideas online
platform

-Review &
Chapter
Assessment

-iReady for 40
minutes/week

-Whole Group
Lesson

-Exit Tickets
(4th grade shared
folder Math
already created
or create your
own online via
Big Ideas online
platform)

-See Strategies
for
Differentiating
Instruction to
utilize during
Math Centers

-See Resources
by Chapter for
Daily Skills &
Vocab,
Prerequisite
Skills, Extra
Practice,
Reteach, Enrich
and Extend
Activities

4.MD.A.1 Know relative sizes of
measurement units within one system
of units including km, m, cm; kg, g;
lb, oz.; l, ml; hr, min, sec. Within a
single system of measurement,
express measurements in a larger
unit in terms of a smaller unit.
Record measurement equivalents in a
two-column table.

- Compare sizes
of metric units of
length.

- Write metric
lengths using
smaller metric
units.

- Make tables of
equivalent metric
lengths.

I can write
lengths using
equivalent
metric
measures.

Chapter Chapter 4.MD.A.2
11 11:

(15 Lesson 1 Use the four operations to solve word
days) 1 problems involving distances,
intervals of time, liquid volumes,
masses of objects, and money,
including problems involving simple
fractions or decimals, and problems
that require expressing
measurements given in a larger unit
in terms of a smaller unit. Represent
measurement quantities using
diagrams such as number line
diagrams that feature a measurement
scale.

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

- Compare sizes of metric units of mass and capacity.

- Write metric masses and capacities using smaller metric units.

- Make tables of equivalent metric measures.

I can write masses and capacities using equivalent metric measures.

Chapter 11 Chapter 11: 4.MD.A.2

(15 days)

Lesson 2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

- Compare sizes of customary units

I can write lengths using

Chapter 11 Chapter 11:

4.MD.A.1 Know relative sizes of measurement units within one system

(15 days)	Lesson 3	<p>of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>4.MD.A.2</p> <p>Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>	<p>of length.</p> <ul style="list-style-type: none"> • Write customary lengths using smaller customary units. • Make tables of equivalent customary lengths. 	<p>equivalent customary measures.</p>	<p>-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)</p> <p>-See Strategies for Differentiating Instruction to utilize during Math Centers</p> <p>-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities</p> <p>-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform</p>
(15 days)	Chapter 11: Lesson 4	<p>4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>4.MD.A.2</p> <p>Use the four operations to solve word problems involving distances, intervals of time, liquid volumes,</p>	<ul style="list-style-type: none"> • Compare sizes of customary units of weight. • Write customary weights using smaller customary units. • Make tables of equivalent customary weights. 	<p>I can write weights using equivalent customary measures.</p>	<p>-iReady for 40 minutes/week</p> <p>-Whole Group Lesson</p> <p>-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)</p> <p>-See Strategies for Differentiating</p>

masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

4.MD.A.1

Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

- Compare sizes of customary units of capacity.

- Write customary capacities using smaller customary units. I can write capacities using equivalent customary measures.

- Make tables of equivalent customary capacities.

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich

Chapter Chapter
11 11:

4.MD.A.2

(15 Lesson Use the four operations to solve word
days) 5 problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

4.MD.A.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

- Make a line plot.
- Interpret a line plot.
- Use a line plot to solve a real-life problem.

I can make line plots and use them to solve problems.

Chapter 11 (15 days)
Chapter 11: Lesson 6

4.DL.B.5

Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

		4.MD.A.1					-Whole Group Lesson
		Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.					-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)
			<ul style="list-style-type: none"> ● Compare sizes of units of time. 				-See Strategies for Differentiating Instruction to utilize during Math Centers
Chapter 11	Chapter 11:	4.MD.A.2					
(15 days)	Lesson 7	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	<ul style="list-style-type: none"> ● Write amounts of time using smaller units. ● Make tables of equivalent amounts of time. 	I can write amounts of time using equivalent measures			-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities
							-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform
							-iReady for 40 minutes/week
		4.MD.A.1					-Whole Group Lesson
		Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.	<ul style="list-style-type: none"> ● Understand a problem. ● Make a plan to solve. ● Solve a problem. 	I can solve multi-step word problems involving elapsed time.			-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)
Chapter 11	Chapter 11:						
(15 days)	Lesson 8						

4.MD.A.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite

4.MD.A.1

Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

● Write measures using smaller units.

I can add and subtract mixed measures.

● Use regrouping to rewrite a mixed measure.

Chapter 11 Chapter 11:

(15 days) Lesson 9

4.MD.A.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using

diagrams such as number line diagrams that feature a measurement scale.

Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Chapter Opener

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or

Chapter Chapter 4.M.A.3
12 12:

(9 Lesson Apply the area and perimeter
days) 1 formulas for rectangles in real world
and mathematical problems.

• Write a formula for the perimeter of a rectangle.

• Find the perimeter of a rectangle.

I can use a formula to find the perimeter of a rectangle.

through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created

Chapter 12 Chapter 4.M.A.3

12 12:

(9 days) Lesson 2 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

- Write a formula for the area of a rectangle.

I can use a formula to find the area of a rectangle.

- Find the area of a rectangle.

Chapter 12 Chapter 4.M.A.3

12 12:

(9 days) Lesson 3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

- Find an unknown measure of a rectangle given the area.

I can find unknown measures of rectangles.

- Find an unknown measure

of a rectangle given the perimeter.

or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

4.M.A.3

Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

4.OA.A.3

Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including

- Understand a problem.
- Make a plan to solve.
- Solve a problem.

I can solve multi-step word problems involving perimeter or area.

Chapter 12
Chapter 12:
(9 days)
Lesson 4

rounding.

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-Review & Chapter Assessment

-iReady for 40 minutes/week

-Chapter Opener

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra

Chapter Chapter
13 13: 4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. (14 Lesson 1 Identify these in two-dimensional days) 1 figures.

- Identify points, lines, line segments, and rays.

- Name points, lines, line segments, and rays.

- Draw points, lines, line segments, and rays.

I can identify and draw points, lines, line segments, and rays.

Practice,
Reteach, Enrich
and Extend
Activities

-Homework by
lessons may be
assigned via the
workbook or
through the Big
Ideas online
platform

-iReady for 40
minutes/week

-Whole Group
Lesson

-Exit Tickets
(4th grade shared
folder Math
already created
or create your
own online via
Big Ideas online
platform)

-See Strategies
for
Differentiating
Instruction to
utilize during
Math Centers

-See Resources
by Chapter for
Daily Skills &
Vocab,
Prerequisite
Skills, Extra
Practice,
Reteach, Enrich
and Extend
Activities

-Homework by
lessons may be
assigned via the
workbook or
through the Big
Ideas online

Chapter 13	Chapter 13:	4.G.A.1		
(14 days)	Lesson 2	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	<ul style="list-style-type: none">● Identify angles as right, straight, acute, or obtuse.● Name angles.● Draw angles.	I can identify and draw angles.

					platform
					-iReady for 40 minutes/week
					-Whole Group Lesson
					-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)
					-See Strategies for Differentiating Instruction to utilize during Math Centers
					-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities
					-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform
					-iReady for 40 minutes/week
					-Whole Group Lesson
					-Exit Tickets (4th grade shared folder Math already created or create your own online via
Chapter 13	Chapter 13:	4.G.A.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	<ul style="list-style-type: none"> Identify intersecting lines, parallel lines, and perpendicular lines. Draw intersecting lines, parallel lines, and perpendicular lines. 	I can identify and draw intersecting lines, parallel lines, and perpendicular lines.
(14 days)	Lesson 3				
Chapter 13	Chapter 13:	4.M.B.4	Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:	<ul style="list-style-type: none"> Use fractional parts of a circle to measure angles. Explain how degrees are related to fractional parts of a circle. 	I can measure angles using degrees.
(14 days)	Lesson 4		4.M.B.4a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by		

considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles. b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

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-See Resources by Chapter for

4.M.B.4 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

4.M.B.4a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles.

- Find the angle measures of a pattern block.

- Use a pattern block to find an angle measure.

I can find the measures of angles.

4.M.B.4b An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

Chapter 13
(14 days)
Chapter 13:
Lesson 5

Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

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-Homework by lessons may be assigned via the

4.G.A.1

Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

4.M.B.4 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

4.M.B.4a An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a "one-degree angle," and can be used to measure angles.

4.M.B.4b An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

4.M.B.5 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

● Use a protractor to measure an angle.

● Use a protractor to draw an angle.

I can measure and draw angles.

Chapter 13
(14 days)
Chapter 13:
Lesson 6

workbook or through the Big Ideas online platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

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-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math

4.M.B.5 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

- Identify the parts of an angle.

Chapter 13
(14 days)
Chapter 13:
Lesson 7

4.M.B.6 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.

- Find the measure of an angle by adding its parts.
- Write an equation to find an angle measure.

I can find the measure of an angle using its parts.

Chapter 13
(14 days)
Chapter 13:
Lesson 8

4.M.B.5 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

- Describe how a pair of angles are related.

I can find the measures of unknown angles.

4.M.B.6 Recognize angle measure as additive. When an angle is

- Write an equation to find an

decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.

unknown angle measure.

- Solve an equation to find an unknown angle measure.

already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-Review & Chapter Assessment

-iReady for 40 minutes/week

-Chapter Opener

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies

Chapter 14

(12 days = 10 + 2 days for iReady testing)

Chapter 14: Lesson 1

4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

• Determine whether a shape has line symmetry.

• Identify how many lines of symmetry a shape has.

• Draw each line of symmetry a shape has.

I can identify shapes that have line symmetry.

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies

for
Differentiating
Instruction to
utilize during
Math Centers

-See Resources
by Chapter for
Daily Skills &
Vocab,
Prerequisite
Skills, Extra
Practice,
Reteach, Enrich
and Extend
Activities

-Homework by
lessons may be
assigned via the
workbook or
through the Big
Ideas online
platform

-iReady for 40
minutes/week

-Whole Group
Lesson

-Exit Tickets
(4th grade shared
folder Math
already created
or create your
own online via
Big Ideas online
platform)

-See Strategies
for
Differentiating
Instruction to
utilize during
Math Centers

-See Resources
by Chapter for
Daily Skills &
Vocab,
Prerequisite
Skills, Extra

Chapter
14

(12
days

= 10 +
2 days

for
iReady
testing)

Chapter
14:
Lesson
2

4.G.A.3 Recognize a line of
symmetry for a two-dimensional
figure as a line across the figure such
that the figure can be folded along
the line into matching parts. Identify
line-symmetric figures and draw
lines of symmetry.

- Draw a
symmetric shape
given one half of
the shape and a
line of symmetry.

- Draw a
symmetric shape
given one half of
the shape.

I can draw
symmetric
shapes.

Practice,
Reteach, Enrich
and Extend
Activities

-Homework by
lessons may be
assigned via the
workbook or
through the Big
Ideas online
platform

-iReady for 40
minutes/week

-Whole Group
Lesson

-Exit Tickets
(4th grade shared
folder Math
already created
or create your
own online via
Big Ideas online
platform)

-See Strategies
for
Differentiating
Instruction to
utilize during
Math Centers

-See Resources
by Chapter for
Daily Skills &
Vocab,
Prerequisite
Skills, Extra
Practice,
Reteach, Enrich
and Extend
Activities

-Homework by
lessons may be
assigned via the
workbook or
through the Big
Ideas online

Chapter
14

4.G.A.2

(12
days
= 10 +
2 days
for
iReady
testing)

Chapter
14:
Lesson
3

Classify two-dimensional figures
based on the presence or absence of
parallel or perpendicular lines, or the
presence or absence of angles of a
specified size. Recognize right
triangles as a category, and identify
right triangles.

- Identify sides of
a triangle with the
same length.

- Identify sides of
a triangle with
different lengths.

- Use sides to
classify a triangle.

I can classify
triangles by
their sides.

platform

-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

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-iReady for 40 minutes/week

-Whole Group Lesson

-Exit Tickets (4th grade shared folder Math already created or create your own online via

Chapter 14

4.G.A.2

(12 days = 10 + 2 days for iReady testing)

Chapter 14: Lesson 4
Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

- Identify an angle as right, acute, or obtuse.
- Use angles to classify a triangle.
- Use angles and sides to classify a triangle.

I can classify triangles by their angles.

Chapter 14

4.G.A.2

(12 days = 10 + 2 days for

Chapter 14: Lesson 5
Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

- Identify parallel sides and sides with the same length in a quadrilateral.
- Identify right angles of a

I can classify quadrilaterals.

iReady testing)

quadrilateral.

- Use angles and sides to classify a quadrilateral.

Big Ideas online platform)

-See Strategies for Differentiating Instruction to utilize during Math Centers

-See Resources by Chapter for Daily Skills & Vocab, Prerequisite Skills, Extra Practice, Reteach, Enrich and Extend Activities

-Homework by lessons may be assigned via the workbook or through the Big Ideas online platform

-Review & Chapter Assessment

-iReady for 40 minutes/week

Technology Integration

Learn Zillion	https://learnzillion.com/
Math Playground	http://www.mathplayground.com/grade_4_games.html
Internet4Classrooms (all skills)	http://www.internet4classrooms.com/skills-4th-mathbuilders.htm
iReady learning platform	Students can access through the Clever portal

TECH.8.1.5.A.1

Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.

TECH.8.1.5.A.3

Use a graphic organizer to organize information about problem or issue.

TECH.8.1.5.E.1

Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a

	variety of tasks.
TECH.8.1.5.F.1	Apply digital tools to collect, organize, and analyze data that support a scientific finding.
TECH.8.2.5.D.3	Follow step by step directions to assemble a product or solve a problem.
TECH.8.2.5.E.4	Use appropriate terms in conversation (e.g., algorithm, program, debug, loop, events, procedures, memory, storage, processing, software, coding, procedure, and data).

Interdisciplinary Connections

- 4.DL.B.5 Math/Science: Climate Change data literacy--make a line plot to display a data set of measurements in fractions of a unit in regards to natural resources.
- 4.M.A.2 Math/Science: Climate Change problem solving--use the four operations to solve word problems related to the use of natural resources and involving distance, time, liquid volume, and/or the mass of objects.
- 4.MD.3 Math/Engineering: Use the skills of area and perimeter to design a house, zoo, city, etc.
- 4.MD.6 Math/Art: Design a kitchen or bathroom tile and list the angle measurements of the tiles
- 4.MD.6 Math/Science: Correlating physics unit to math (For example: building roller coasters in connection to science units)
- 4.NBT.2 Students will integrate SCIENCE, technology, engineering, and/or art with math to develop a game that involves priority standards addressed in Unit #3
- 4.NF.3 Math/Health/Science: Develop recipes with fractions when planning a real world, large event (For example: birthday party, graduation, holiday)
- 4.OA.3 Math/Music/Reading: Big Ideas Musicals
- 4.OA.3 Math/Science/Reading: Big Ideas STEAM Videos & Performance Tasks
- 4.OA.3 Math/Science: Climate Change problem solving--use the four operations to solve multi-step word problems posed with whole numbers, having whole-number answers and that are based on energy, fuels, and natural resources.
- W.4.7 Math/Social Studies/Writing: Research a famous mathematician

21st Century Life & Career Ready Practices

CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP3	Attend to personal health and financial well-being.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP11	Use technology to enhance productivity.
PFL.9.1.4.B	Money Management
PFL.9.1.4.E	Becoming a Critical Consumer