

## Math Essential Elements – 7<sup>th</sup> Grade Curriculum Map by Quarter

	I Can Statements	Standards-Based Essential Elements	Activities/Formative Assessments
1 <sup>st</sup> Quarter	I can use a ratio to model or describe the relationship.	EE.7.RP.1-3- Use a ratio to model or describe a relationship.	-Use groups of objects to compare the parts (2 of part a to 3 of part b; represent the ratio 2:3) Give students pre-made ratios to represent.
	I can add fractions with like denominators that have sums less than or equal to one.	EE.7.NS.1- Add fractions with like denominators (halves, thirds, fourths, and tenths) with sums less than or equal to one.	-Give students problems with like denominators to solve.
	I can solve multiplication problems with products to 100.	EE.7.NS.2.a.-Solve multiplication problems with products to 100.	-Have students build fluency with multiplication games; using arrays; skip counting.
	I can solve division problems with divisors up to five and a divisor of 10.	EE.7.NS.2.b.-Solve division problems with divisors up to five and also with a divisor of 10 without remainders.	-Give students division problems to solve using different methods and they can share their method with the class (for example: Label it, “Charley’s Method” or whatever the student’s name is).
	I can write a fraction with a denominator of 10 as a decimal.	EE.7.NS.2.c.-Express a fraction with a denominator of 10 as a decimal.	-Give the students fractions to match with decimals if they need that support.
	I can compare quantities represented as decimals to tenths.	EE.7.NS.3-Compare quantities represented as decimals in real-world examples to tenths.	-Model how to change a decimal into tenths; Give students decimals and it represented in tenths to match or find around the room.
	I can use properties of operations to demonstrate that expressions are equivalent.	EE.7.EE.1-Use the properties of operations as strategies to demonstrate that expressions are equivalent.	-Match expressions that are equivalent.
	I can identify an arithmetic sequence of whole numbers with a whole number common difference.	EE.7.EE.2-Identify an arithmetic sequence of whole numbers with a whole number common difference.	-Model number sequences that have the common difference; Have students create their own for students to find the common difference.

	I can use the concept of equality with models to solve one-step addition and subtraction equations.	EE.7.EE.4- Use the concept of equality with models to solve one-step addition and subtraction equations.	-Use manipulatives and have a balance visual for students to see that the equations are balanced/equal on each side.
2 <sup>nd</sup> Quarter	I can match two similar geometric shapes that are proportional in size and have the same orientation.	EE.7.G.1- Match two similar geometric shapes that are proportional in size and in the same orientation.	-Provide students with 2-d or 3-d (squares, rectangles, circles, spheres, rectangular prisms, cubes, pyramids) students can then match the shapes based on size/orientation.
	I can recognize geometric shapes when following given conditions.	EE.7.G.2- Recognize geometric shapes with given conditions.	-Sort shapes by vertices/angles; match their name to them if students are having trouble identifying them.
	I can match a two-dimensional shape with a three-dimensional shape that shares an attribute.	EE.7.G.3- Match a two-dimensional shape with a three-dimensional shape that shares an attribute.	-Provide students with a list of attributes; students will use visuals or tactual shapes to match them in under the given attribute.
	I can find the perimeter of a rectangle by adding the measures of the sides.	EE.7.G.4-Determine the perimeter of a rectangle by adding the measures of the sides.	- Provide students with rectangles with sides measured to find perimeter.
	I can identify angles that are acute, obtuse, and right.	EE.7.G.5-Recognize angles that are acute, obtuse, and right.	-Make different angles with popsicle sticks, pipe cleaners and have students label them.
	I can use the formula for length x width to find the area of a rectangle and check my answer by using unit squares.	EE.7.G.6-Determine the area of a rectangle using the formula for length x width, and confirm the result using tiling or partitioning into unit squares.	-Provide students with the formula for area ( $l \times w$ ) and unit squares to check their answers; Students can make different rectangles and give them to each other to find the area.
	I can use data collected to answer questions about the data.	EE.7.SP.1-2- Answer a question related to the collected data from an experiment, given a model of data, or from data collected by the student.	-Let students collect data from peers; construct their graph (may need a template); the group can answer questions about the graphs.
	I can compare two sets of data within a picture graph, bar graph, or line plot.	EE.7.SP.3- Compare two sets of data within a single data display such as a picture graph, line plot, or bar graph.	-Ask students questions to compare data using the graphs; it could be in a game type format for engagement.
	I can use the terms possible or impossible to describe the probability of events occurring.	EE.7.SP.5-7- Describe the probability of events occurring as possible or impossible.	-Have the terms possible/impossible ready for students to use on popsicle sticks and they can raise them to vote if they think the probability of events you make a list of it possible/impossible.

3 <sup>rd</sup> Quarter	I can use a ratio to model or describe the relationship.	EE.7.RP.1-3- Use a ratio to model or describe a relationship.	-Use groups of objects to compare the parts (2 of part a to 3 of part b; represent the ratio 2:3) Give students pre-made ratios to represent.
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\*Highlights indicate standards that are aligned to the Instructionally Embedded Assessments.

\*Online website with some virtual math tools

<https://www.didax.com/math/virtual-manipulatives.html>

