

## Math Essential Elements – 6<sup>th</sup> Grade Curriculum Map by Quarter

	I Can Statements	Standards-Based Essential Elements	Activities/Formative Assessments
<b>1<sup>st</sup> Quarter</b>	I can compare relationships between two-unit fractions.	EE.6.NS.1- Compare the relationships between two-unit fractions.	-Use fractions to compare with visual fraction bars, fractions with shapes, or create your own visual fraction models for students to compare.
	I can use fair share and equal shares to divide.	EE.6.NS.2- Apply the concept of fair share and equal shares to divide.	-Use white boards and manipulatives for students to use fair share to divide the quotient into the circles.
	I can use manipulatives or a calculator to solve two-factor multiplication problems with products up to 50.	EE.6.NS.3- Solve two-factor multiplication problems using products up to 50 using concrete objects and/or a calculator.	-Provide age-appropriate manipulatives for students to use and a calculator; Create an anchor chart for each step.
	I can label equivalent number sentences.	EE.6.EE.1-2- Identify equivalent number sentences.	-Provide equivalent labels for students to identify equivalent number sentences.
	I can apply properties of addition to identify equal numerical expressions.	EE.6.EE.3- Apply the properties of addition to identify equivalent numerical expressions.	-Create an anchor chart to show students the commutative and associative properties for students to refer to when creating or sorting equivalent expressions.
	I can match an equation to a real-world problem that has variables to represent numbers.	EE.6.EE.5-7- Match an equation to a real-world problem in which variables are used to represent numbers.	-Have real world problems set up and students can do a math hunt around the room to match the pre-made equations.

2 <sup>nd</sup> Quarter	I can use unit squares to solve real-world mathematical problems about area.	EE.6.G.1- Solve real-world and mathematical problems about area using unit squares.	-Have students make their own square or rectangle to trade with other students to solve for the area; provide unit squares (square manipulatives).
	I can use unit cubes to solve real-world mathematical problems about volume.	EE.6.G.2- Solve real-world and mathematical problems about volume using unit cubes.	-Provide students with rectangular prisms to fill with unit cubes to measure volume (use online tools if needed to measure volume).
	I can display data on a graph or table to show the variability in data.	EE.6.SP.1-2- Display data on a graph or table that shows variability in the data.	-Collect data and students can make their own graph (may need a template) to share the variability; students can compare their graphs.
	I can summarize data distributions shown in graphs or tables.	EE.6.SP.5- Summarize data distributions shown in graphs or tables.	-Use an anchor chart for summarizing data using terms: peaks, outliers, symmetric distribution so students can see the different graphs/tables; provide students with examples and have them sort to the vocabulary terms.
	I can show a simple ratio relationship.	EE.6.RP.1- Demonstrate a simple ratio relationship.	-Give students shape manipulatives or paper to make shapes to cut for ratio; have shapes pre-cut to have students match the fraction and ratio.
	I can describe that positive and negative numbers are used together to show quantities that have opposite directions or values.	EE.6.NS.5-8- Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero).	-Use positive and negative numbers to talk about temperature in different parts of the world (during different seasons), you could discuss elevation or money.

3 <sup>rd</sup> Quarter	I can compare relationships between two-unit fractions.	EE.6.NS.1- Compare the relationships between two-unit fractions.	-Use fractions to compare with visual fraction bars, fractions with shapes, or create your own visual fraction models for students to compare.
	I can use fair share and equal shares to divide.	EE.6.NS.2- Apply the concept of fair share and equal shares to divide.	-Use white boards and manipulatives for students to use fair share to divide the quotient into the circles.
	I can use manipulatives or a calculator to solve two-factor multiplication problems with products up to 50.	EE.6.NS.3- Solve two-factor multiplication problems using products up to 50 using concrete objects and/or a calculator.	-Provide age-appropriate manipulatives for students to use and a calculator; Create an anchor chart for each step.
	I can label equivalent number sentences.	EE.6.EE.1-2- Identify equivalent number sentences.	-Provide equivalent labels for students to identify equivalent number sentences.
	I can apply properties of addition to identify equal numerical expressions.	EE.6.EE.3- Apply the properties of addition to identify equivalent numerical expressions.	-Create an anchor chart to show students the commutative and associative properties for students to refer to when creating or sorting equivalent expressions.
	I can match an equation to a real-world problem that has variables to represent numbers.	EE.6.EE.5-7- Match an equation to a real-world problem in which variables are used to represent numbers.	-Have real world problems set up and students can do a math hunt around the room to match the pre-made equations.

4 <sup>th</sup> Quarter	I can use unit squares to solve real-world mathematical problems about area.	EE.6.G.1- Solve real-world and mathematical problems about area using unit squares.	-Have students make their own square or rectangle to trade with other students to solve for the area; provide unit squares (square manipulatives).
	I can use unit cubes to solve real-world mathematical problems about volume.	EE.6.G.2- Solve real-world and mathematical problems about volume using unit cubes.	-Provide students with rectangular prisms to fill with unit cubes to measure volume (use online tools if needed to measure volume).
	I can display data on a graph or table to show the variability in data.	EE.6.SP.1-2- Display data on a graph or table that shows variability in the data.	-Collect data and students can make their own graph (may need a template) to share the variability; students can compare their graphs.
	I can summarize data distributions shown in graphs or tables.	EE.6.SP.5- Summarize data distributions shown in graphs or tables.	-Anchor chart for summarizing data using terms: peaks, outliers, symmetric distribution so students can see the different graphs/tables; provide students with examples and have them sort to the vocabulary terms.
	I can show a simple ratio relationship.	EE.6.RP.1- Demonstrate a simple ratio relationship.	-Give students shape manipulatives or paper to make shapes to cut for ratio; have shapes pre-cut to have students match the fraction and ratio.
	I can describe that positive and negative numbers are used together to show quantities that have opposite directions or values.	EE.6.NS.5-8- Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero).	-Use positive and negative numbers to talk about temperature in different parts of the world (during different seasons), discuss elevation or money.

\*Online website with some virtual math tools

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