District Instructional Guide
PRESCOTT UNIFIED SCHOOL DISTRICT

Date Revised June 2017

Grade Level: 4th	Subject: Math	Time:	Core Text: EngageNY

4th grade Materials List

Time/Days	Module	Topic	Standards/ Skills *Repeated/Reinforced	Assessment	Resources
Weeks 1-4 25 days	1 **Place Value, Rounding, and Algorithms for Addition and Subtraction** **Omit 17 & 19**	A 4 Days Lessons 1-4 B 2 Days Lessons 5-6 C 4 Days Lessons 7-10 3 - Days Assessment D	**Place Value of Multi-Digit Whole Numbers** **4.NBT.1 -** Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. **4.NBT.2 -** Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. *4.OA.1 - Represent verbal statements of multiplicative comparisons as multiplication equations. Interpret a multiplication equation as a comparison (e.g., 35 is the number of objects in 5 groups, each containing 7 objects, and is also the number of objects in 7 groups, each containing 5 objects). **Comparing Multi-Digit Whole Numbers** **4.NBT.2 -** Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. **Rounding Multi-Digit Whole Numbers** **4.NBT.3 -** Use place value understanding to round multi-digit whole numbers to any place. *Mid-Module Assessment: Topics A–C (review content 1 day, assessment 1⁄2 day, return 1⁄2 day, remediation or further applications 1 day)* **Multi-Digit Whole Number Addition**	**Module 1 Assessments**	For parents: Parents Resource Page **EngageNY Module 1** EMBARC Module 1 Zearn Module 1 Student Notes and Exit Tickets

		2 Days Lessons 11-12	**4.OA.3 -** Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity. **4.NBT.4 -** Fluently add and subtract multi-digit whole numbers using a standard algorithm. *4.NBT.1 - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *4.NBT.2 **-** Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.		
		E 4 Days Lessons 13-16	**Multi-Digit Whole Number Subtraction** **4.OA.3 -** Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity. **4.NBT.4** - Fluently add and subtract multi-digit whole numbers using a standard algorithm. *4.NBT.1 - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *4.NBT.2 - Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.		
		F 3 Days Lessons 17-19	**Addition and Subtraction Word Problems** **4.OA.3 -** Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity.		

		Assessment 3 Days	*4.NBT.1 - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *4.NBT.2 - Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. *4.NBT.4 - Fluently add and subtract multi-digit whole numbers using a standard algorithm. *End-of-Module Assessment: Topics A–F (review content 1 day, assessment 1⁄2 day, return 1⁄2 day, remediation or further application 1 day)*		
Time/Days	**Module**	**Topic**	**Standards/ Skills** ***Repeated/Reinforced**	**Assessment**	**Resources**
Week 5 7 Days	2 **Unit Conversions and Problem Solving with Metric Measurement** **Omit nothing**	A 3 Days Lessons 1-3 B 2 Days Lessons 4-5	**Metric Unit Conversions** **4.MD.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 and in a smaller unit in terms of a larger unit. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1,12), 2,24), (3,36).* **4.MD.2** - Use the four operations to solve word problems and problems in real-world context involving distances, intervals of time (hr, min, sec), liquid volumes, masses of objects, and money, including decimals and problems involving fractions with like denominators, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using a variety of representations, including number lines that feature a measurement scale. **4.MD.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	Module 2 Assessments	Parents Resource Page EngageNY Module 2 Zearn Module 2 Module 2 Students Notes & Exit Tickets EMBARC Module 2

		Assessment 2 Days	of a smaller unit and in a smaller unit in terms of a larger unit. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1,12), 2,24), (3,36).* **4.MD.2 -** Use the four operations to solve word problems and problems in real-world context involving distances, intervals of time (hr, min, sec), liquid volumes, masses of objects, and money, including decimals and problems involving fractions with like denominators, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using a variety of representations, including number lines that feature a measurement scale. *End-of-Module Assessment: Topics A–B (assessment 1⁄2 day, return 1⁄2 day, remediation or further applications 1 day)*		
Time/Days	**Module**	**Topic**	**Standards/ Skills** ***Repeated/Reinforced**	**Assessment**	**Resources**
Weeks 6-12 43 days	3 **Multi-Digit Multiplication and Division** **Omit Problems 1 & 4 from Lesson 1 concept development** **Omit drawing of models in problems 2 & 4 in concept development of lesson 8**	A 3 Days	**Multiplicative Comparison Word Problems** **4.OA.1** - Represent verbal statements of multiplicative comparisons as multiplication equations. Interpret a multiplication equation as a comparison (e.g., 35 is the number of objects in 5 groups, each containing 7 objects, and is also the number of objects in 7 groups, each containing 5 objects). **4.OA.2** - Multiply or divide within 1000 to solve word problems involving multiplicative comparison (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison). See Table 2. **4.MD.3** - Apply the area and perimeter formulas for rectangles in mathematical problems and problems in real-world contexts including problems with unknown side lengths. See Table 2. *****4.OA.3 - Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity.	Module 3 Assessments	For parents: Parents Resource Page EngageNY Module 3 EMBARC Module 3 Zearn Module 3 Module 3 Students Notes & Exit Tickets

	Omit problem 2 of problem set in lesson 8 Omit lessons 10, 19, 21, 31, 33	B 3 Days Lessons 4-6 C 5 Days Lessons 7-11 9-10 (same day) D 2 Days Lessons	**Multiplication by 10, 100, and 1,000** **4.NBT.5** - Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. *****4.OA.1 - Represent verbal statements of multiplicative comparisons as multiplication equations. Interpret a multiplication equation as a comparison (e.g., 35 is the number of objects in 5 groups, each containing 7 objects, and is also the number of objects in 7 groups, each containing 5 objects). *****4.OA.2 - Multiply or divide within 1000 to solve word problems involving multiplicative comparison (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison). See Table 2. *****4.NBT.1 - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. **Multiplication of up to Four Digits by Single-Digit Numbers** **4.NBT.5** - Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. *4.OA.2 - Multiply or divide within 1000 to solve word problems involving multiplicative comparison (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison). See Table 2. *4.NBT.1 - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. **Multiplication Word Problems**		

		12-13 2 Days Assessment E 8 Days Lessons 14-21 F 4 Days Lessons 22-25 G 8 Days	**4.OA.1** - Represent verbal statements of multiplicative comparisons as multiplication equations. Interpret a multiplication equation as a comparison (e.g., 35 is the number of objects in 5 groups, each containing 7 objects, and is also the number of objects in 7 groups, each containing 5 objects). **4.OA.2** - Multiply or divide within 1000 to solve word problems involving multiplicative comparison (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison). See Table 2. **4.OA.3** - Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity. **4.NBT.5** - Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. <u>Mid-Module Assessment: Topics A–D (review 1 day, assessment ½ day, return ½ day)</u> **Division of Tens and Ones with Successive Remainders** **4.NBT.6** - Demonstrate understanding of division by finding whole-number quotients and remainders with up to four-digit dividends and one-digit divisors. <u>*4.OA.3</u> - Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity. **Reasoning with Divisibility** **4.OA.4** - Find all factor pairs for a whole number in the range 1 to 100 and understand that a whole number is a multiple of each of its factors.		

		Lesson 26-33 H 5 Days Lessons 34-38 3 Days Assessment	**Division of Thousands, Hundreds, Tens, and Ones** **4.OA.3** - Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity. **4.NBT.6** - Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity. **4.NBT.1** - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. **Multiplication of Two-Digit by Two-Digit Numbers** **4.NBT.5** -Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. ***4.OA.3** -Solve multistep word problems using the four operations, including problems in which remainders must be interpreted. Understand how the remainder is a fraction of the divisor. Represent these problems using equations with a letter standing for the unknown quantity. ***4.MD.3** - Apply the area and perimeter formulas for rectangles in mathematical problems and problems in real-world contexts including problems with unknown side lengths. See Table 2. End-of-Module Assessment: Topics A–H (review 1 day, assessment ½ day, return ½ day, remediation or further applications 1 day)		
Time/Days	**Module**	**Topic**	**Standards/ Skills *Repeated/Reinforced**	**Assessment**	**Resources**
Weeks 13-20 45 Days	5 **Fraction Equivalence**	Topic A 6 days Lessons 1-6	**Decomposition & Fraction Equivalence** **4.NF.3a** Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	Module 5 Assessments	For parents: Parents Resource Page

	, Ordering, and Operations Combine lessons 1-3 Omit lesson 29, 40	B 5 days Lessons 7-11 C 4 days Lessons 12-15 D 6 days Lessons 16-21	**4.NF.3b** Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. **4.NF.4a** Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to represent 5/4 as the product 5(1/4), recording the conclusion by the equation 5/4 = 5(1/4) **Fraction Equivalence Using Multiplication** **4.NF.1 1.** Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. 4.NF.3b Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. **Fraction Comparison** **4.NF.2** Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. **Addition and Subtraction of Fractions** **4.NF.3a** Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. **4.NF.3d** Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. *4.NF.1 Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. *MD.2 Use the four operations to solve word problems involving		EngageNY Module 5 EMBARC Module 5 Zearn Module 5 Module 5 Students Notes & Exit Tickets

		      2 Days Assessment E 7 Days Lessons 22-28	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. *<u>Mid-Module Assessment: Topics A–D (assessment ½ day, return ½ day, remediation or further applications 1 day)</u>* **<u>Extending Fraction Equivalence to Fractions Greater Than 1</u>** **4.NF.2** Compare two fractions with different numerators and different denominators (e.g., by creating common denominators or numerators and by comparing to a benchmark fraction). a. Understand that comparisons are valid only when the two fractions refer to the same size whole. b. Record the results of comparisons with symbols >, =, or <, and justify the conclusions **4.NF.3** Understand a fraction a/b with a > 1 as a sum of unit fractions (1/b). a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way (e.g., 3/8 = 1/8 + 1/8+1/8; 3/8 = 2/8 + 1/8; 2 1/8 = 1 + 1 + 1/8 + or 2 1/8 = 8/8 + 8/8 + 1/8). c. Add and subtract mixed numbers with like denominators (e.g., by using properties of operations and the relationship between addition and subtraction and/or by replacing each mixed number with an equivalent fraction). d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators. **4.MD.4** Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *4.NBT.6 Demonstrate understanding of division by finding whole-number quotients and remainders with up to four-digit dividends and one-digit divisors. *4.NF.1 Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size		

			of the parts differ even though the two fractions themselves are the same size. Use this principle to understand and generate equivalent fractions.		
		F 6 Days Lessons 29-34	<u>**Addition and Subtraction of Fractions by Decomposition**</u> **4.NF.3c** Add and subtract mixed numbers with like denominators (e.g., by using properties of operations and the relationship between addition and subtraction and/or by replacing each mixed number with an equivalent fraction). *4.MD.2 Use the four operations to solve word problems and problems in real-world context involving distances, intervals of time (hr, min, sec), liquid volumes, masses of objects, and money, including decimals and problems involving fractions with like denominators, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using a variety of representations, including number lines that feature a measurement scale.		
		G 6 Days Lessons 35-40	<u>**Repeated Addition of Fractions as Multiplication**</u> **4.NF.4** Build fractions from unit fractions. a. Understand a fraction *aa bb* as a multiple of a unit fraction 1 *bb* . In general, *aa bb* = a x 1 *bb* . b. Understand a multiple of *aa bb* as a multiple of a unit fraction 1 *bb* , and use this understanding to multiply a whole number by a fraction. In general, n x *aa bb* = *nn xx aa bb* . c. Solve word problems involving multiplication of a whole number by a fraction. *4.OA.2 Multiply or divide within 1000 to solve word problems involving multiplicative comparison *4.MD.2 Use the four operations to solve word problems and problems in real-world context involving distances, intervals of time (hr, min, sec), liquid volumes, masses of objects, and money, including decimals and problems involving fractions with like denominators, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using a variety of representations, including number lines that feature a measurement scale. * 4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.		

		H 1 Day Lesson 41 2 Days Assessment	**Exploring a Fraction Pattern** **4.OA.5** Generate a number pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself and explain the pattern informally (e.g., given the rule "add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers). *End-of-Module Assessment: Topics A–H (assessment ½ day, return ½ day, remediation or further applications 1 day)*		
Time/Days	**Module**	**Topic**	**Standards/ Skills** ***Repeated/Reinforced**	**Assessment**	**Resources**
Weeks 21-24 20 Days	6 Decimal Fractions Omit nothing	A 3 Days Lesson 1-3 B 5 Days Lessons 4-8	**Exploration of Tenths** **4.NF.6** - Use decimal notation for fractions with denominators 10 (tenths) or 100 (hundredths), and locate these decimals on a number line. *4.NBT.1 - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *4.MD.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 and in a smaller unit in terms of a larger unit. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1,12), 2,24), (3,36). **Tenths and Hundredths** **4.NF.5** - Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 (tenths) and 100 (hundredths). For example, express 3/10 as 30/100, and ad 3/10 + 4/100 = 34/100. (Note: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators, in general, is not a requirement at	Module 6 Assessments	For parents: Parents Resource Page EngageNY Module 6 EMBARC Module 6 Zearn Module 6 Module 6 Students Notes & Exit Tickets

			this grade.) **4.NF.6** - Use decimal notation for fractions with denominators 10 (tenths) or 100 (hundredths), and locate these decimals on a number line. **4.NBT.1** - Apply concepts of place value, multiplication, and division to understand that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. **4.NF.1** - Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to understand and generate equivalent fractions. **4.NF.7** - Compare two decimals to hundredths by reasoning about their size. Understand that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <. **4.MD.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 and in a smaller unit in terms of a larger unit. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1,12), 2,24), (3,36).		
		2 Days Mid-assess.	*Mid-Module Assessment: Topics A–B (assessment 1 day, return ½ day, remediation or further applications ½ day)*		
		C 3 Days Lesson 9-11	**Decimal Comparisons** **4.NF.7** -Compare two decimals to hundredths by reasoning about their size. Understand that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <. 4.MD.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 and in a smaller unit in terms of a larger unit. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a		

			4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1,12), 2,24), (3,36). 4.MD.2 -Use the four operations to solve word problems and problems in real-world context involving distances, intervals of time (hr, min, sec), liquid volumes, masses of objects, and money, including decimals and problems involving fractions with like denominators, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using a variety of representations, including number lines that feature a measurement scale.		
		D 3 Days Lessons 12-14	**Addition with Tenths and Hundredths** **4.NF.5** - Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 (tenths) and 100 (hundredths). For example, express 3/10 as 30/100, and ad 3/10 + 4/100 = 34/100. (Note: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators, in general, is not a requirement at this grade.) *4.NF.6 - Use decimal notation for fractions with denominators 10 (tenths) or 100 (hundredths), and locate these decimals on a number line. *4.NF.3c - c. Add and subtract mixed numbers with like denominators (e.g., by using properties of operations and the relationship between addition and subtraction and/or by replacing each mixed number with an equivalent fraction). *4.MD.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 and in a smaller unit in terms of a larger unit. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1,12), 2,24), (3,36).		
		E 2 Days	**Money Amounts as Decimal Numbers** **4.MD.2** Use the four operations to solve word problems and problems in		

		Lessons 15-16 2 Days End Assess.	real-world context involving distances, intervals of time (hr, min, sec), liquid volumes, masses of objects, and money, including decimals and problems involving fractions with like denominators, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using a variety of representations, including number lines that feature a measurement scale. ***4.NF.5** -Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 (tenths) and 100 (hundredths). For example, express 3/10 as 30/100, and ad 3/10 + 4/100 = 34/100. (Note: Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators, in general, is not a requirement at this grade.) 4.NF.6 - Use decimal notation for fractions with denominators 10 (tenths) or 100 (hundredths), and locate these decimals on a number line. *End-of-Module Assessment: Topics A–E (assessment 1 day, return ½ day, remediation or further applications ½ day)*		
Time/Days	**Module**	**Topic**	**Standards/ Skills *Repeated/Reinforced**	**Assessment**	**Resources**
25-28 20 days	4 **Angle Measure and Plane Figures** **Embed entire module into other modules.** **Topic A could be taught in Art during module 3**	A 4 days Lessons 1-4 B 4 days Lessons 5-8 2 Days Assessment	**Angle Measure and Plane Figures** **4.G.1** - Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. **4.MD.5** Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: 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 1/360 of a circle is called a “one-degree angle,” and can be used to measure angles. b. An angle that turns through	Module 4 Assessments	For parents: Parents Resource Page EngageNY Module 4 Zearn Module 4 EMBARC Module 4 Module 4 Student Notes & Exit Tickets

	Topics B & C could be taught directly after module 3 (provides scaffolding for Module 5) **Topic D could be taught in Art during Modules 5, 6, or 7**	C 3 days Lessons 9-11 D 5 days Lessons 12-16 End of Module Assessment	n one-degree angles is said to have an angle measure of n degrees **4.MD.6** Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. **4.MD.7** Understand angle measures 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 within mathematical problems as well as problems in real-world contexts. **4.G.1** Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. **4.G.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 (e.g., understand right triangles as a category, and identify right triangles). **4.G.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.		