Teacher: CORE Math Grade 4 Year: 2011-12
Course: Math Grade 4 Month: All Months

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e			*	PIRALED S	XILL.				
p	September	Spiral Revi	ew ~ *						
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m	F (1.1	-							
b e	Essential Questions	Content	Skills		Vocabulary	Assessments	Lessons	Resources	Standards
r		Place Value, comparing numbers and rounding	•	numbers to one million Read and write numbers in expanded form up to one million Read and write numbers up to one	• Expanded form • Greater than > • Less than < • Equal to = • Compare • Whole number • Place value • rounding			Envision Text Book Topic 1- 1,1-2,1- 3,1-4	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.3-Use place value understanding to round multi-digit whole numbers to any place. 4.N.1-Skip

	<ul> <li>skip count by 1,000's</li> <li>Understand place value structure of base 10 system: 10 ones = 10; 10 tens = 100, up to 10 thousands = 10,000</li> </ul>	count by 1,000's 4.N.4 - Understand the place value structure of the base ten number system: 10 ones = 1 ten 10 tens = 1 hundred 10 hundreds = 1 thousand 10 thousands = 1 ten thousand
Relationship between fractions and decimals	<ul> <li>Read and write decimals to the hundredths</li> <li>Compare hundredths</li> <li>Compare decimals in tenths and hundredths using money as context</li> <li>Understand decimals as part of a whole</li> <li>Make change using combined coins and dollar amounts</li> </ul>	Envision Text Book Topic 1-5, 1-6  1-6  4.NF.7- Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or 4.M.8 - Make change, using

					combined coins and dollar amounts
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r	Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
		Adding and Subtracting Whole Numbers	sums and differ ces b appro matir whole numb	number e estimate Visual model erati regrouping  ag on acti  ers ed an ch ut upi act ers ed			Envision Text Book 2-2,2-4,2- 5,2-6, 2-7	4.NBT.4- Fluently add and subtract multi-digit whole numbers using the standard algorithm.

	ds with and without regroupi ng  • Subtract numbers with zeros up to the hundred thousan ds place • Draw a picture or diagram to translate an everyda y situation into a number sentence				
Multiplication Meaning and Facts	multiplication proble mas repeate dadditio n Find pattern s for multiplies of 2,5,9 using a	<ul><li>Properties of operations</li><li>Rectangular arrays</li></ul>	T 3 3	ext Book -1,3-2,3- ,3-4,3- ,3-6, 3-7	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

ds • Prime	operations.
chart numbers	Illustrate and
Read	explain the
and • Odd/even	calculation by
write • Multiples	using
multipl   • product	equations,
ication	rectangular
sentenc	arrays, and/or
es	area models.
using	4.OA.1-
the	Interpret a
commu	multiplication
tative	equation as a
propert	comparison,
y	e.g., interpret
• Re-	35 = 5  A - 7
write	as a statement
multipl	that 35 is 5
ication	times as many
sentenc	as 7 and 7
es es	times as many
using	as 5.
the	Represent
distribu	verbal
tive	statements of
propert	multiplicative
y of	comparisons
multipl	as
ication  • Find	multiplication
	equations. 4.OA.2-
pattern s for	
multipl	Multiply or divide to
es of	solve word
10,11,	problems
10,11,	involving
• Draw a	multiplicative
picture	comparison,
or	e.g., by using
diagra	drawings and
m to	equations with
solve	a symbol for
multipl	the unknown
ication	number to
situatio	represent the
ns in	problem,
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N O Spiral	SPIRAI Review ~ *	LED SKILL:	understanding of the properties of odd/even numbers as a result of multiplication
			number. Determine whether a given whole number in the range 1â€'100 is prime or composite. 4.N.13 - Develop an
			factors. Determine whether a given whole number in the range 1â€'100 is a multiple of a given one-digit
		number s as a result of multipl ication	range 1â€'100. Recognize that a whole number is a multiple of each of its
		proble ms  Explain the propert ies of odd/ev en	multiplicative comparison from additive comparison.1 4.OA.4-Find all factor pair for a whole number in the

e \* m \* b Essential e Content Skills Vocabulary Assessments Lessons Resources Standards Questions Division Draw Division Envision 4.NBT.6-Find Text Book Meanings picture • Quotients wholeand Facts models • 4-1,4-2,4number Remainder 3,4-4,4-5 quotients and to remainders solve • Digit divisio • Dividends with up to • Place four-digit n dividends and proble value ms Properties one-digit of divisors, Draw operations using arrays to write • Multiply strategies multipl | Inverse based on ication operation place value, and Visual the properties of operations, divisio model and/or the n fact familie relationship between Explain multiplication and division. the Illustrate and special explain the divisio n rules calculation by with 0 using and 1 equations, Explain rectangular arrays, and/or that multipl area models. ication 4.OA.2is the Multiply or divide to inverse solve word operati on of problems divisio involving multiplicative n Draw comparison, picture e.g., by using models drawings and equations to

	solve divisio n word proble ms	with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.1
Multiplying by One Digit Numbers	<ul> <li>Multiply by multiple s of 10 and 100</li> <li>Round factors to estimate products</li> <li>Multiply a 2 digit number by a one digit number</li> <li>Multiply a 4 digit number by a one digit n</li></ul>	Envision Text Book 5-1, 5-3,5- 4,5-6, 5-7, find a supplement for 4 digit by 1 digit, 5-8  represents ten times what it represents in the place to its right. 4.NBT.3-Use place value understanding to round multi-digit whole numbers to any place. 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 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.1
				comparison from additive comparison.1
Patterns and Expressions	<ul> <li>Read and write expressions with variables and numbers</li> <li>Generate a number pattern</li> </ul>	Compare/comparison     add     subtract     Multiply     Divide     Variable     Expression	Book 6- 1, 6-2,6- 3,6-4	4.OA.2- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with

		<u> </u>	
		Geometric pattern	a symbol for
		Generate	the unknown
	•	• identify	number to
	rule		 represent the
	<ul> <li>Write a</li> </ul>		problem,
	rule for a		distinguishing
	given		multiplicative
	number		comparison
	pattern		from additive
	<ul> <li>Multiply</li> </ul>		comparison.1
	or divide		4.OA.5-
	to solve		Generate a
	problems		number or
	for an		shape pattern
	unknown		that follows a
	number		given rule.
	• generate		Identify
	geometric		apparent
	patterns		features of the
	that		pattern that
	follow a		were not
	given		explicit in the
	rule		rule itself.
	• determine		4.A.3 -Find
	the value		the value or
	or values		values that
	that will		will make an
	make an		open sentence
	open open		true, if it
	sentence		contains < or >
	true if it		4.A.4 -
	contains		Describe,
			 extend, and
	<mark>,=</mark>		make
			generalizations
			about numeric
			$(\tilde{A} \cdot \tilde{A} - ? + , ,)$
			$(A \cdot A - \cdot + \cdot, \cdot)$
			geometric
			patterns
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b	Essential								
e	Questions	Content	Skills		Vocabulary	Assessments	Lessons	Resources	Standards
r	Questions								
		Multiplying	•	Round	<ul> <li>Round</li> </ul>			Envision	4.NBT.3-Use
		by 2-digit		factors	<ul> <li>Estimate</li> </ul>			Text Book	place value
		Numbers		to	• Factor			7-2, 7-4,7-	understanding
				estimate	• Product				to round
				products	<ul> <li>Operations</li> </ul>				multi-digit
			•		• Multiply				whole
					• Multi-step				numbers to
					• 4 operations				any place.
				by	• Remainder				4.NBT.5-
				•	• Unknown				Multiply a
				_	quantity				whole number
			•	Multiply	•				of up to four
				1 0	Reasonableness				digits by a
					• Place value				
									one-digit whole number,
				-	• Multi-digit				1 '11
				digit	• Whole				and multiply
				numbers	numbers				two two-digit
			•	Solve					numbers,
				multi-					using .
				step					strategies
				word					based on place
				problem					value and the
				s using					properties of
				four					operations.
				operatio					Illustrate and
				ns					explain the
									calculation by
									using
									equations,
									rectangular
									arrays, and/or
									area models.
									4.OA.2-
									Multiply or
									divide to solve
									word
									problems
									involving
									multiplicative
									comparison,
									e.g., by using
									drawings and
									equations with
		<u> </u>				[			equations with

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						a symbol for
						the unknown
						number to
						represent the
						problem,
						distinguishing
						multiplicative
						comparison
						from additive
						comparison.1
						4.OA.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
						rounding.
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r y	Essential Questions	Content	Skills	Vocabulary	Assessments Lessons	Resources	Standards
		Dividing by 1-digit divisors	remainder s  Divide 2 or 3 digit by one digit numbers with and without remainder s  List factors of a whole number in the range 1-100 Determine	<ul> <li>Properties of operations</li> <li>Multi-digit</li> <li>Factors</li> <li>Whole numbers</li> <li>Prime</li> <li>Composite</li> <li>Multi-step</li> <li>Four operations</li> <li>Rectangular arrays</li> <li>Reasonableness</li> <li>Estimate</li> <li>range</li> </ul>		Envision Text Book 8- 3,8-5,8- 6,8-8,8-9, 8-10	4.NBT.6-Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. 4.OA.3-Solve multistep word problems posed with whole numbers and having whole-number answers using

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					the four
					operations,
					including
					problems in
					which
					remainders
					must be
					interpreted.
					Represent 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.
					4.OA.4-Find
					all factor pairs
					for a whole
					number in the
					range
					1â <b>€</b> '100.
					Recognize that
					a whole
					number is a
					multiple of
					each of its
					factors.
					Determine
					whether a
					given whole
					number in the
					range 1‑100
					is a multiple
					of a given
_	]				one-digit

		number. Determine whether a given whole number in the range 1‑100 is prime or composite.
Lines, Angles, and Shapes	<ul> <li>Draw points, lines, lines, lines segments, rays and angles</li> <li>Identify points, lines, and line segments in 2 dimension al figures</li> <li>Measure and identify angles in whole number degrees using a protractor</li> <li>Sketch angles of specified measureId entify angles as right, acute, and obtuse</li> <li>Classify 2 dimension al figures based on parallel or</li> <li>Points Line segment</li> <li>Rays</li> <li>Angles</li> <li>Angles</li> <li>Rays</li> <li>Angles</li> <li>Angles</li> <li>Arguare</li> <li>Weasure and obtuse</li> <li>Common endpoint</li> <li>Center</li> <li>Circular arc</li> <li>Circle</li> <li>Degree</li> </ul>	Envision Text Book 9-1,9-2,9- 3,9-4, 9-5, 9-6  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. Recognize right triangles as a category, and identify right triangles. 4.MD.5- Recognize

perpendic ular lines or angles of specified size • Recognize and identify right triangles • Draw angles and identify points and rays • Identify and name polygons recognizin g that their names are related to the number of sides and angles (triangle, quadrilate ral, pentagon, hexagon, octagon)	angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement 4.MD.6- Measure angles in whole- number degrees using a protractor. Sketch angles of specified measure. 4.G.1 - Identify and name polygons, recognizing that their names are related to the number of sides and angles (triangle, quadrilateral,
ral, pentagon,	number of sides and
	(triangle,
	hexagon, and octagon) 4.G.7 -
	Identify points and
	rays when drawing angles

Add	ling and • Add	• Points	4.MD.7-
Sub	tracting non-	• Angle	Recognize
Ang		measure	angle
		• Additive	measure as
	g	•	additive.
		Decomposed	When an
		• Non-	angle is
	deco	overlapping	decomposed
		parts	into non-
	e	• Equation	overlapping
	angle	• Protractor	parts, the
	s into	• angle	angle
	non-		measure of
	over		the whole is
	appii	$\mathbf{n}$	the sum of
	g		the angle
	parts		measures of
	EX:		the parts.
	45*	+	Solve
	45*	=	addition and
	90*		subtraction
	or		problems to
	90*		find
	can		unknown
	be		angles on a
	brok		diagram in
	n		real world
	dowi	1	and
	into		mathematical
	40*	+	problems,
	50*		e.g., by using
	or		an equation
	60*	+	with a
	30*		symbol for
	• Solv	I I	the unknown
	addit	i	angle
	on		measure.
	and		
	subti		
	actio		
	n		
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	ems		
	to		
	find		
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	T				
		own			
		angle			
		s on a			
		diagr			
		am in			
		real			
		world			
		• solve			
		additi			
		on			
		and			
		subtr			
		actio			
		n			
		probl			
		ems			
		to			
		find			
		unkn			
		own			
		angle			
		s on a			
		diagr			
		am in			
		math			
		emati			
		cal			
		probl			
		ems.			
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r	Eccontial	Content	Skills		Vocabulary	Assessments	Lessons	Resources	Standards
		Understanding	•	Review	<ul> <li>Fraction</li> </ul>			Envision	4.NF.1-
		Fractions		drawing	• Equivalent			Text	Explain why
				regions	<ul> <li>Fraction</li> </ul>			Book 10-	a fraction a/b
				and	models			1, 10-	is equivalent
				setsEstimat	<ul> <li>Recognize</li> </ul>			3,10-	to a fraction
				e fractional	<ul> <li>Generate</li> </ul>			4,10-	(n × a)/(n

omounts to	Numerator	5 10	ã hì b.
		5,10-	× b) by
the nearest		6,10-7,	using visual
	Denominator	10-8,10-	fraction
fractions	• Benchmark	9	models, with
	fractions		attention to
models to	•		how the
demonstrat	Comparison		number and
e	• Symbols ,=		size of the
equivalent	1		parts differ
fractions	Compare		even though
• Use	• Estimate		the two
multiplicati	1 -		fractions
on and	• Set		themselves
division to			are the same
make	• Simplest		size. Use this
equivalent	1		principle to
fractions	• Improper		recognize and
	fraction		generate
fractions to	• Mixed		equivalent
1	number		fractions.
form	• Visual		4.NF.2-
<ul><li>Write</li></ul>	model		Compare two
improper			fractions with
fractions as			different
mixed			numerators
numbers			and different
and mixed			denominators,
numbers as			e.g., by
improper			creating
fractions			common
<ul> <li>Compare</li> </ul>			denominators
fractions			or
with			numerators,
different			or by
numerators			comparing to
and			a benchmark
denominat			fraction such
ors by			as 1/2.
creating			Recognize
common			that
denominat			comparisons
ors or by			are valid only
comparing			when the two
to a			fractions refer
benchmark			to the same
fraction, or			whole.
		, ,	,

by using a	Record the
visual	results of
model,	comparisons
using the	with symbols
symbols,	>, =, or
=	4.NF.3-
• Understand	Understand a
teh order	fraction a/b
of fractions	with $a > 1$ as
<mark>on a</mark>	a sum of
<mark>number</mark>	fractions 1/b.
line and as	4.N.7 -
<mark>divisions</mark>	Develop an
<mark>of whole</mark>	understanding
numbers	of fractions as
	locations on
	number lines
	and as
	divisions of
	whole
	numbers

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Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
Questions	Adding and Subtracting Fractions	and subtract ct fracti ons with like deno	Denominator  Fractions  Addition  Subtraction  Common denominator  Mixed numbers  Simplest form  Improper fraction  Mixed number			Text Book 11-1	4.NF.3- Understand a fraction a/b with a > 1 as a sum of fractions 1/b.
			• Visual				

	model	
Understanding Decimals	<ul> <li>Use models and place value charts to represent decimals to the hundredt hs</li> <li>Use decimal notation for fractions with denomin ators 10 or 100</li> <li>Compare (Symbols) (S</li></ul>	Envision Text Book 12-1, 12- 2,12-3,12- 4  with denominators 10 or 100. 4.NF.7- Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or
Operations with Decimals	Add and subtr act Add deci subtract Place usin g a visu notation al wide el      Add and subtr Add Add and subtr Add Add Add Add Add Add Add Add Add Ad	Envision Text Book 13-3, 13-4

	act deci mals in the tenth s and hund redt hs		
Area and Perimeter	Apply the area	,	Envision 4.MD.3- Text Book 14-1, 14-2, 14-6, 14-7, 14-8 formulas for rectangles in real world and mathematica problems.
Multiplying Fractions	<ul> <li>Multiply fractions (with denominators of 2,3,4,5,6,8,10, 12,100) by a whole number</li> <li>Whole number</li> <li>Whole number</li> <li>Multiply</li> <li>Fraction</li> <li>Multiple</li> <li>Product</li> <li>Equivalent</li> <li>fractions</li> </ul>	t	4.NF.4a- Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to

• understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. EX: 10/1 x 1/3 = 5/1 x 2/3 • Solve word problems involving multiplication of a fraction by a whole number. EX: by using visual fraction with denominator 100 as an equivalent fraction with denominator 100 as an equivalent fraction with denominator 100 as an equivalent fraction with denominator 100 and add two fractions with denominator 100 as an equivalent fraction with denominator 100 and add two fractions and fraction with denominator 100 and add two fracti				
a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. EX: 10/1 x 1/3 = 5/1 x 2/3 of 1/a and a sa multiple of a/b as a fraction by a whole number. by a whole number. EX: by using visual fraction models and equations represent the problem by a whole number, e.g., by using visual fraction with denominator 10 as an equivalent fraction with denominator 10 as an equivalent fractions with denominator and extend previous understanding of fractions with denominator for multiplication to multiply a fraction by a whole number. e.g., whole number. e.g., and and extend previous understandings of fractions with denominator for fraction with denominator for fraction with denominator fraction such denominator fraction with denominator fraction such denominat	<ul> <li>understand a</li> </ul>	•	represent 5/4	
multiple of 1/b, and use this understanding to multiply a fraction by a whole number. EX: 10/1 x 1/3 = 8 solve word problems involving multiplication by a whole number. EX: by using visual fraction models and equations represent the problem reproblem problem a fraction with denominator 100 as an equivalent fraction with denominator 100 and add two fractions 100 as an equivalent fraction with denominator 100 as an equivalent fraction with denomi	multiple of	Denominator	as the produc	t
1/b, and use this understanding to multiply a fraction by a whole number. EX: 10/1 x 1/3 = 5/1 x 2/3			1	
this understanding to multiply a fraction by a whole number. EX:  10/1 x 1/3 = 5/1 x 2/3  • Solve word problems involving multiplication of a fraction by a whole number. EX: by using visual fraction models and equations represent the problem  • Express a fraction with denominator 100 as an equivalent fraction with denominator 100 as an equivalent fraction by a multiplication of fraction with denominator 100 as an equivalent fraction with denominator 100 and add two fractions 100 as an fraction with denominator 100 as an equivalent fraction with denominator 100 and add two fractions 100 as an fraction with denominator 100 as an equivalent fraction with denominator 100 as an e				
understanding to multiply a fraction by a whole number. EX: 10/1 x 1/3 = 5/1 x 2/3  • Solve word problems involving multiplication by a whole number. EX: by a whole number. EX: by using visual fraction models and equations represent the problem  • Express a fraction with denominator 100 and add two fractions with to number. Ex such committed the problem.  • Learn a committed th			-	<i>y</i>
to multiply a fraction by a whole number. EX: 10/1 x 1/3 = 5/1 x 2/3  • Solve word problems involving multiplication by a whole number. EX: by using visual fraction models and equations represent the problem  • Express a fraction with denominator 100 as an equivalent fractions with denominator 100 as an equivalent fractions with denominator 100 as an equivalent fraction with denominator 100 as an equivalent fraction with denominator 100 and add two fractions to fraction with denominator 100 and add two fractions to fraction with denominator 100 and add two fractions to 100 as an fraction with denominator fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 and add two fractions to 100 as an fraction with denominator to 100 as an fraction the fraction where				
fraction by a whole unwher. EX:  10/1 x 1/3 = 5/1 x 2/3 of 1/b, and use this understanding to multiple of arb as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. EX: word problems involving wisual fraction by a whole number. EX: word problems involving wisual fraction models and equations represent the problem  • Express a fraction with denominator 100 as an equivalent fractions with denominator 100 as an equivalent with the denominator 100 as an equivalent fractions with denominator 10 as an equivalent fractions with denominator 10 as an equivalent fractions with the denominator 100 as an equivalent fractions with denominator 100 as an equivalent fractions with the denominator 100 as an equivalent fractions with denominator 100 as an equivalent fractions with the denominator 100 as an equivalent fractions with denominator 100 as an equivalent fraction with denominator 100 as an equivalent fraction with denominator 100 and add two fractions 100 as an fraction with denominator 100 and add two fractions 100 as an fraction with denominator 100 and add two fractions 100 as an an fraction with denominator 100 and add two fractions 100 as an an fraction with denominator 100 as an fraction with denominator 100 as an an fraction t				
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respective	fraction with
denominators	denominator
of 10 and	100, and use
100.EX: 3/10	this technique
+ 4/100 =	to add two
30/100 +	fractions with
4/100	respective
	denominators
	10 and 100.

## SPIRALED SKILL:

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Essential Questions	Content	Skills	Vocabulary	Assessments	Lessons	Resources	Standards
	Solids	identify solids • Define and identify vertices , faces, edges	• 3 dimensinoal • Cube, rectangular prism, pyramid, cylinder, sphere • Vertices • Edges			Envision Text Book 15-1, 15-2, 15-5	
ı	Measurement Time, and Temperature	length using	Measureme Units Customar			Text Book 16-1, 16- 2, 16-	measuremen
		ry units and	• Metric			6,16-7,16-	units within one system o
		metric	system • Length			' '	units including kn

cm, kg, (kilometer, m, cm; kg, g; g, lb, meter, lb, oz.; l, ml; centimeter, hr, min, sec. oz., 1, ml, hr, inches, feet, Within a min, vards) single system Weight of sec) Express (kilogram, measurement, measure gram, pound, express ments in ounce) measurements a larger • Capacity in a larger unit in (milliliter, unit in terms terms of liter) of a smaller • Time (hour, unit. Record a smaller second, measurement unit minute, day, equivalents in (exampl week, a two-column e know month) table. 4.MD.2-Use that 1 Four foot = the four operations 36 Distance operations to • Intervals of inches) solve word Use the time problems four • Liquid involving operatio volume distances, Mass intervals of ns to solve Fractional time, liquid conversi amounts volumes, Decimals masses of problem • Diagram objects, and quantity money, involvin including problems distance, involving time, simple fractions or liquid volume, decimals, and problems that mass, require money Use a expressing ruler to measurements measure given in a to the larger unit in nearest terms of a **standard** smaller unit. <mark>unit</mark> Represent (whole, measurement

1/2 <b>,</b>	quantities
1/4,whol	using
e feet,	diagrams
whole	such as
<mark>yards,</mark>	number line
whole	diagrams that
centimet	feature a
ers,	measurement
whole	scale.
meters)	4.M.2 -Use a
<b>1</b> 1	ruler to
tools	measure to
and	the nearest
units	standard unit
(custom	(whole, ½
ary and	and $\hat{A}^{1/4}$
metric)	inches, whole
appropri	feet, whole
ate for	yards, whole
measuri	centimeters,
ng	and whole
length	meters)
and	4.M.4 -Select
mass	tools and
(grams,	units
kilogra	appropriate to
ms)	the mass of
measure	the object
capacity	being
using	measured
milliliter	(grams and
s and	kilograms)
liters	4.M.5 -
calculate	Measure
elapsed	mass, using
time in	grams
hours	4.M.6 -Select
and half	tools and
hours	units
not	appropriate to
crossing AM/PM	the capacity
calculate	being measured
elapsed time in	(milliliters
time in	and liters)
days and	4.M.7-

	weeks, using a calendar			Measure capacity, using milliliters and liters 4.M.9 - Calculate elapsed time in hours and half hours, not crossing A.M./P.M. 4.M.10- Calculate elapsed time in days and weeks, using a calendar
Data Graphs	bar graphs Interpret line graphs Make a line plot to display a data set of measure ments in fractions of a unit (1/2, ½, 1/8) Make a bar graph	Observations Survey pictograph tables conclusions predictions data set axis	17-2,17-	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.

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SPIRALED SKILL: M

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Essential Questions	Content	Skills		Vocabulary	Assessments	Lessons	Resources	Standards
	Transformations,	•	Recognize	• Recognize			Envision	4.G.3-
	Congruence, and		a line of	• Symmetry			Text	Recognize
	Symmetry		symmetry	• Two			Book 19-	a line of
			for a 2	dimensional			5,19-6,	symmetry
			dimension	figure				for a two-
			al figure	• Line				dimensiona
		•	Draw	<ul> <li>Identify</li> </ul>				figure as a
			lines of	•				line across

symmetry Symmetric	the figure
figures	such that
• Line of	the figure
symmetry	can be
• Figure	folded
	along the
	line into
	matching
	parts.
	Identify
	line-
	symmetric
	figures and
	draw lines
	of
	symmetry.