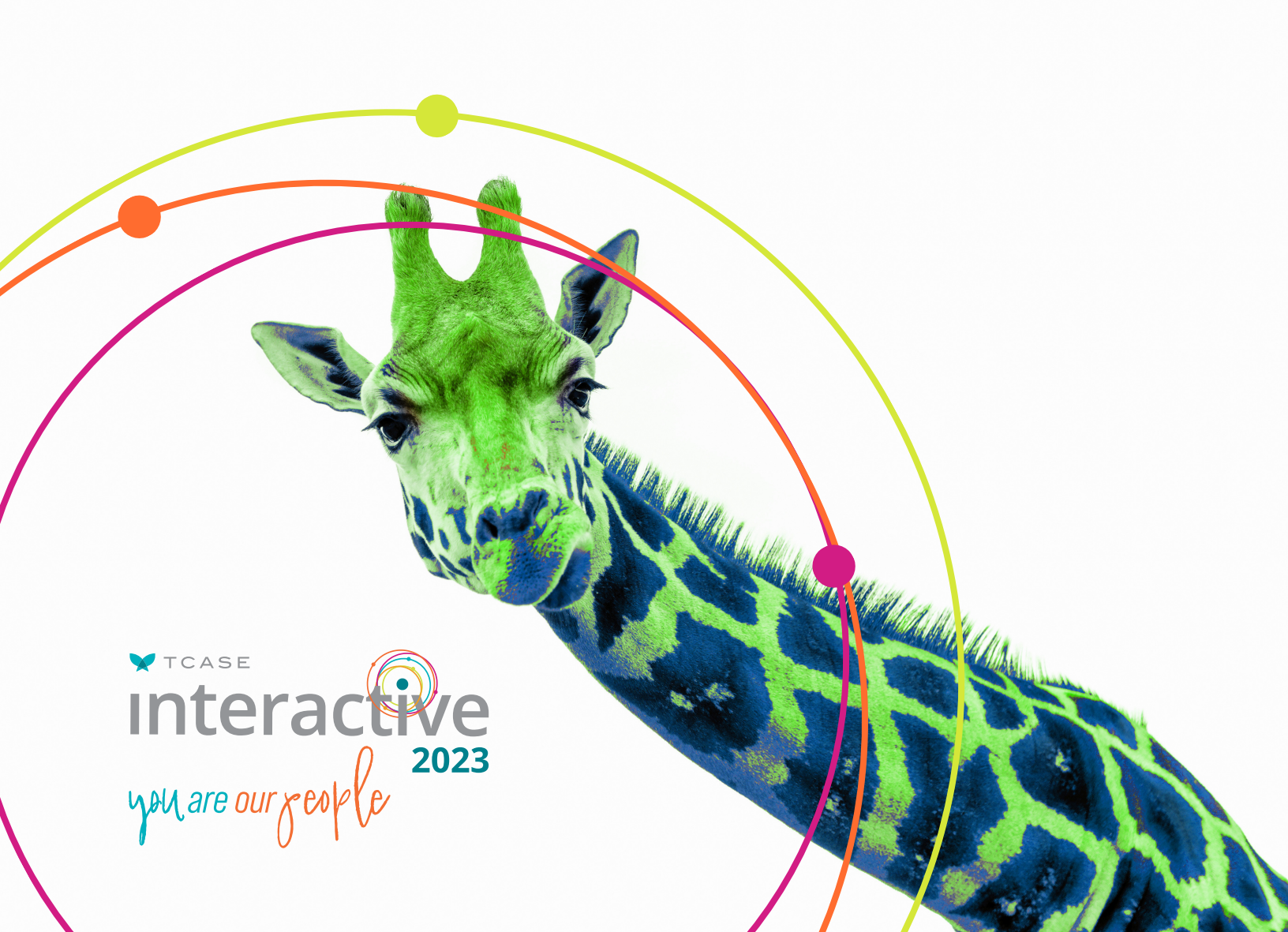
Where's the DESIGN in your Specially Designed Instruction

Kathy Clapsaddle,
lead4ward

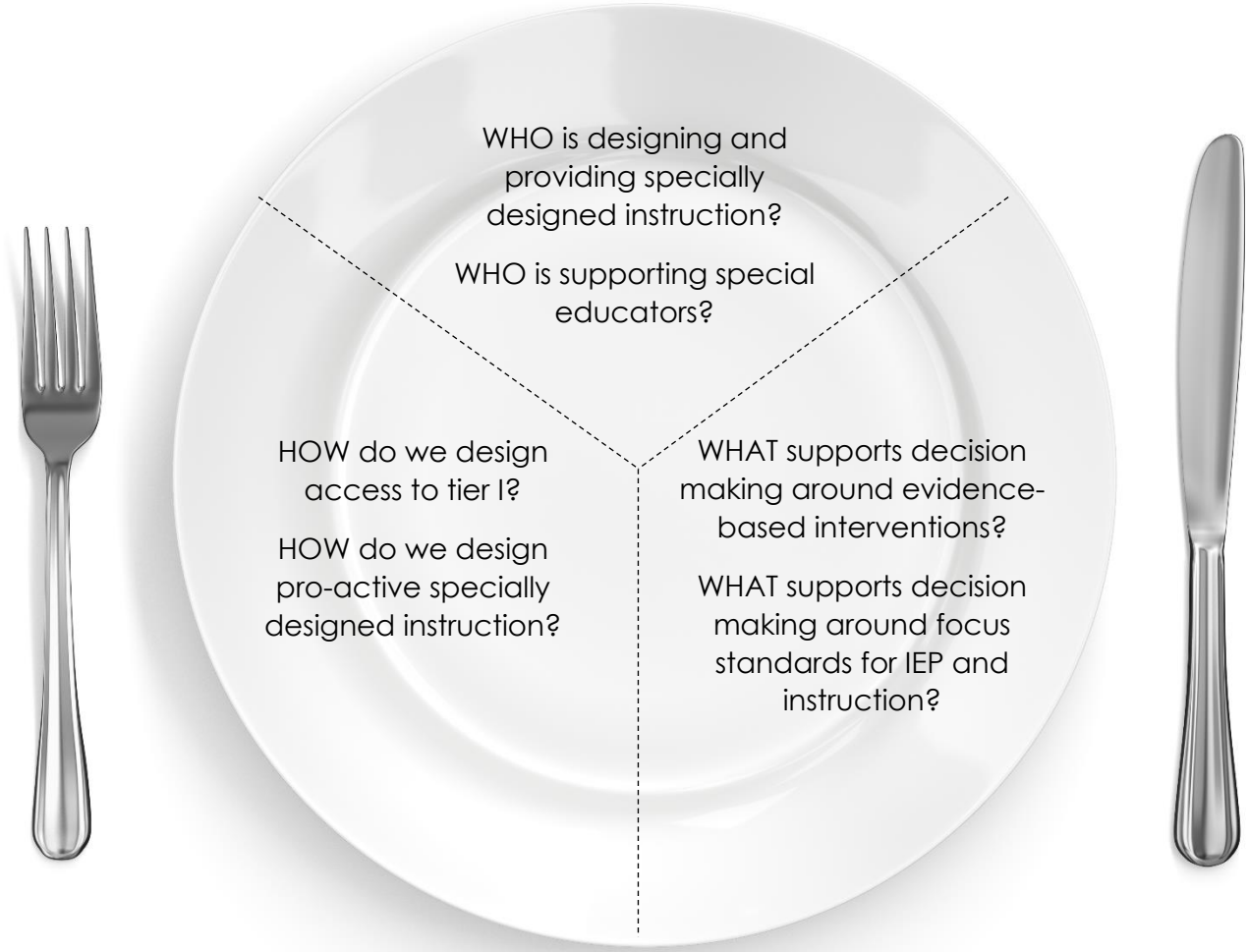


TCASE interactive 2023
you are our people

Where's the DESIGN in your Specially Designed Instruction?

Kathy Clapsaddle
lead4ward

kathy@lead4ward.com



WHO?

skilled specialists	effective partnerships	ongoing support

WHAT?

IEP Reference Tool
Mathematics TEKS - Long Strand Concepts K-5

	K	Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5
Tools to Know	K.1(A)	1.1(A)	2.1(A)	3.1(A)	4.1(A)	5.1(A)
	apply mathematics to problems arising in everyday life, society, & the workplace					
	K.1(B)	1.1(B)	2.1(B)	3.1(B)	4.1(B)	5.1(B)
	use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, & evaluating the problem-solving process & the reasonableness of the solution					
	K.1(C)	1.1(C)	2.1(C)	3.1(C)	4.1(C)	5.1(C)
	select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems					
Ways to Show	K.1(F)	1.1(F)	2.1(F)	3.1(F)	4.1(F)	5.1(F)
	analyze mathematical relationships to connect and communicate mathematical ideas					

Strand	K	Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5
Number and Operations	K.2(I) compose & decompose numbers up to 10 with objects & pictures	1.2(B) use concrete & pictorial models to compose & decompose numbers up to 120 in more than one way as so many hundreds, so many tens, & so many ones	2.2(A) use concrete & pictorial models to compose & decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens & ones	3.2(A) compose & decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, & so many ones using objects, pictorial models, & numbers, including expanded notation as appropriate	4.2(B) represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	
	K.2(H) use comparative language to describe two numbers up to 20 presented as written numerals	1.2(C) use objects, pictures, and expanded and standard forms to represent numbers up to 120	2.2(B) use standard, word, and expanded forms to represent numbers up to 1,200			
		1.2(G) represent the comparison of two numbers to 100 using the symbols >,<, or =	2.2(D) use place value to compare & order whole numbers up to 1,200 using comparative language, numbers, & symbols (>,<, or =)	3.2(D) compare & order whole numbers up to 100,000 & represent comparisons using the symbols >, <, or =	4.3(D) compare two fractions with different numerators & different denominators & represent the comparison using the symbols >,<, or =	5.2(B) compare & order two decimals to thousandths & represent comparisons using the symbols >, <, or =
			2.4(C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms	3.4(A) solve with fluency one-step & two-step problems involving addition & subtraction within 1,000 using strategies based on place value, properties of operations, & the relationship		
Algebraic Reasoning	K.3(B) solve word problems using objects and drawings to find sums up to 10 and differences within 10 *(number and operations)*	1.5(D) represent word problems involving addition & subtraction of whole numbers up to 20 using concrete & pictorial models & number sentences	2.7(C) represent and solve addition and subtraction word problems where unknowns may be any one of the three terms in the problem	3.5(B) represent & solve one- & two-step multiplication & division problems within 100 using arrays, strip diagrams, & equations	4.5(A) represent multi-step problems involving the four operations with whole numbers using strip diagrams & equations with a letter standing for the unknown quantity	5.4(B) represent & solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity
		1.3(B) use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as 2+4=___; 3+___=7; and 5 = ___-3		3.5(E) represent real-world relationships using number pairs in a table and verbal descriptions	4.5(B) represent problems using an input-output table & numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence & their position in the sequence	5.4(C) generate a numerical pattern when given a rule in the form y=ax or y=x + a and graph
Geometry & Measurement	K.6(E) classify & sort a variety of regular & irregular two-/three-dimensional figures regardless of orientation or size	1.6(A) classify & sort regular & irregular two-dimensional shapes based on attributes using formal geometric language	2.8(B) classify & sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), & triangular prisms, based on attributes using formal geometric language	3.6(A) classify & sort two-/three-dimensional figures including cones, cylinders, spheres, triangular & rectangular prisms, & cubes, based on attributes using formal geometric language	4.6(D) 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	5.5(A) classify two-dimensional figures in a hierarchy of sets & subsets using graphic organizers based on their attributes & properties
	K.6(D) identify attributes of two-dimensional shapes using informal & formal geometric language interchangeably	1.6(D) identify two-dimensional shapes including circles, triangles, rectangles, & squares as special rectangles, rhombuses & hexagons, & describe their attributes using formal geometric language	2.8(C) classify & sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides & number of vertices	3.6(B) use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, & squares as examples of quadrilaterals & draw examples of quadrilaterals that do not belong to any of these subcategories		
				3.7(B) determine the perimeter of a polygon or a missing length when given perimeter & remaining side lengths in problems	4.5(D) solve problems related to perimeter and area of rectangles where dimensions are whole numbers	5.4(H) represent & solve problems related to perimeter &/or area & related to volume
				3.6(C) determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row	4.8(C) solve problems that deal with measurement of lengths, intervals of time, liquid volumes, mass, & money using addition, subtraction, multiplication, or division as appropriate	
Data Analysis	K.8(C) draw conclusions from real-object & picture graphs	1.8(C) draw conclusions & generate & answer questions using information from picture & bar-type graphs	2.10(C) write & solve one-step word problems involving addition or subtraction using data represented within pictographs & bar graphs with intervals of one	3.8(B) solve one-/two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals	4.9(B) solve one-/two-step problems using data in whole number, decimal, & fraction form in a frequency table, dot plot, or stem-&-leaf plot	5.9(C) solve one-/two-step problems using data from a frequency table, dot plot, bar graph, stem-&-leaf plot, or scatterplot

NOTE: Some long strand standards are included conceptually across strands. Original strand is identified in *italics.*

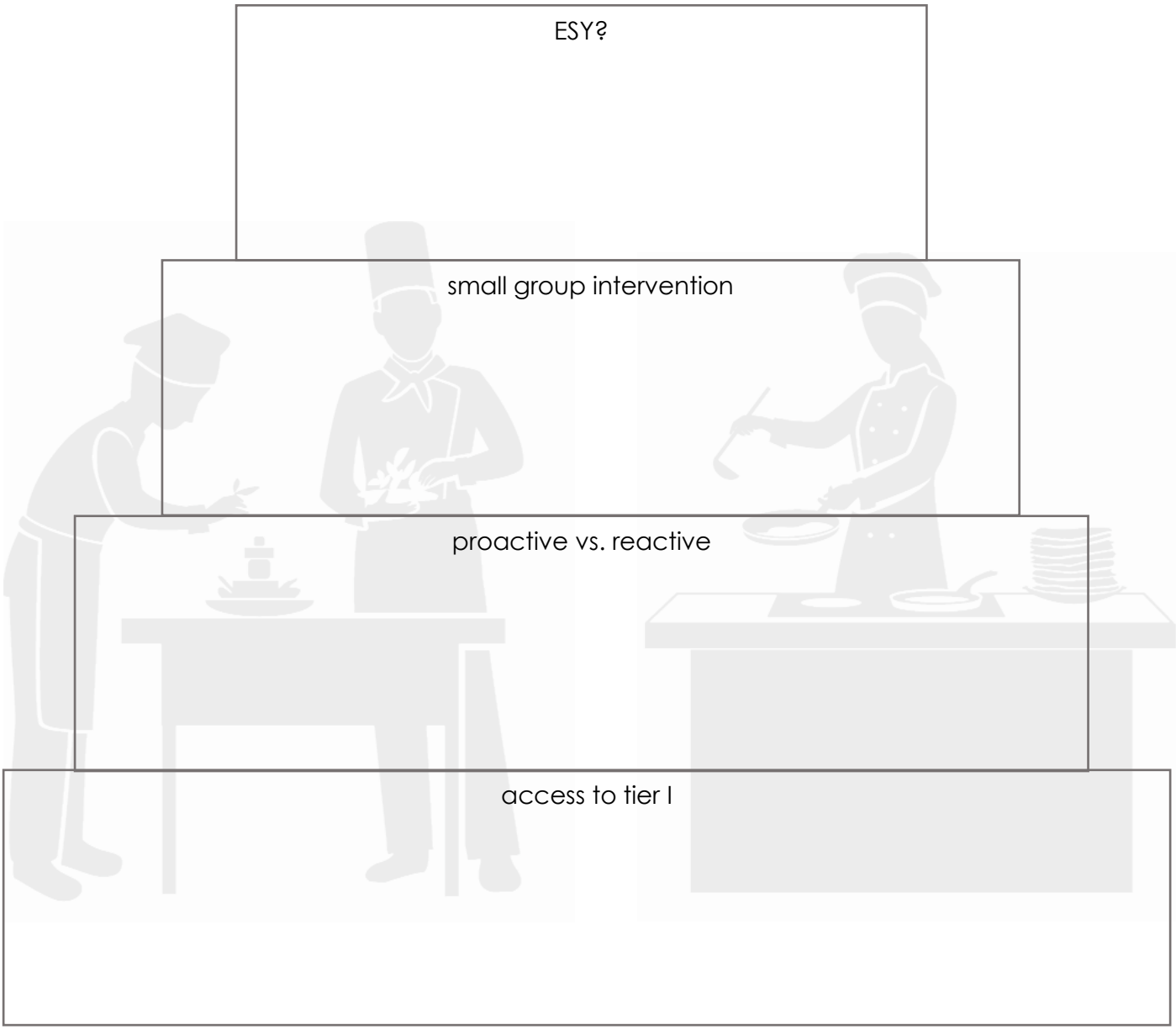
IEP Reference Tool
Mathematics TEKS - Long Strand Concepts 6-EOC

	Gr. 6	Gr. 7	Gr. 8	Alg I/Alg II/Geom
Tools to Know	6.1(A)	7.1(A)	8.1(A)	A.1(A)/2A.1(A)/G.1(A)
	apply mathematics to problems arising in everyday life, society, & the workplace			
	6.1(B)	7.1(B)	8.1(B)	A.1(B)/2A.1(B)/G.1(B)
	use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, & evaluating the problem-solving process & the reasonableness of the solution			
	6.1(C)	7.1(C)	8.1(C)	A.1(C)/2A.1(C)/G.1(C)
	select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems			
Ways to Show	6.1(F)	7.1(F)	8.1(F)	A.1(F)/2A.1(F)/G.1(F)
	analyze mathematical relationships to connect and communicate mathematical ideas			

Strand	Gr. 6	Gr. 7	Gr. 8	Alg I/Alg II/Geom
Expressions, Equations and Relationships	6.10(A) model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts	7.11(A) model and solve one-variable, two-step equations and inequalities	8.8C model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants	A.5(A) solve linear equations in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides *(linear functions, equations & inequalities)*
				2A.6(I) solve rational equations that have real solutions *(Cubic, cube root, absolute value and rational functions, equations, & inequalities)*
	6.6(C) represent a given situation using verbal descriptions, tables, graphs, & equations in the form y=kx or y=x+b	7.7(A) represent linear relationships using verbal descriptions, tables, graphs, & equations that simplify to the form y=mx+b	8.5(I) write an equation in the form y=mx+b to model a linear relationship between two quantities using verbal, numerical, tabular, & graphical representations *(proportionality)*	A.2(I)write systems of two linear equations given a table of values, a graph, and a verbal description
Proportionality	6.5(A) represent mathematical and real-world problems involving ratios and rates using scale factors, tables, graphs, and proportions	7.4(A) represent constant rates of change in mathematical & real-world problems given pictorial, tabular, verbal, numeric, graphical, & algebraic representations, including d=rt	8.5(A) represent linear proportional situations with tables, graphs, and equations in the form of y = kx	A.3(B) calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in content of mathematical & real world problems
	6.4(B) apply qualitative & quantitative reasoning to solve prediction & comparison of real-world problems involving ratios & rates			G.2(C) determine an equation of a line parallel or perpendicular to a given line that passes through a given point *(Coordinate and transformational geometry)*
Expressions, Equations and Relationships: Geometry	6.8(D) determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, & triangles [...] where dimensions are positive rational numbers	7.9(D) solve problems involving the lateral & total surface area of a rectangular prism, rectangular pyramid, triangular prism , & triangular pyramid by determining the area of the shape's net	8.7(B) use previous knowledge of surface area to make connections to the formulas for lateral & total surface area & determine solutions for problems involving rectangular prisms, triangular prisms, & cylinders	G.11(C) apply the formulas for the total and lateral surface area of threedimensional figures, including prisms, pyramids, cones, cylinders, spheres, and composite figures, to solve problems using appropriate units of measure *(two-dimensional and three-dimensional figures)*
	6.8(C) write equations that represent problems related to the area of rectangles, parallelograms, trapezoids, & triangles [...] where dimensions are positive rational numbers			
	6.8(D) determine solutions for problems involving [...] volume of right rectangular prisms where dimensions are positive rational numbers	7.9(A) solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, & triangular pyramids	8.7(A) solve problems involving the volume of cylinders, cones, & spheres	G.11(D) apply the formulas for the volume of three-dimensional figures, including prisms, pyramids, cones, cylinders, spheres, and composite figures, to solve problems using appropriate units of measure *(two-dimensional and three-dimensional figures)*
	6.8(C) write equations that represent problems related to [...] volume of right rectangular prisms where dimensions are positive rational numbers			
Measurement and Data	6.12(A) represent numeric data graphically, including dot plots, stem-&-leaf plots, histograms, & box plots	7.6(G) solve problems using data represented in bar graphs, dot plots, & circle graphs, including part-to-whole & part-to-part comparisons & equivalents	8.11(A) construct a scatterplot & describe the observed data to address questions of association such as linear, non-linear & no association between bivariate data	A.3(C) graph linear functions on the coordinate plane & identify key features, including x-intercept, y-intercept, zeros, & slope, in mathematical & real-world problems
		7.7(A) represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b	8.4(C) use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and realworld problems	2A.8(C) predict and make decisions and critical judgments from a given set of data using linear, quadratic, and exponential models
Personal Financial Literacy	6.5(B) solve real-world problems to find the whole given a part & the percent, to find the part given the whole & the percent, and to find the percent given the part & the whole,including the use of concrete and pictorial models	7.4(D) solve problems involving ratios, rates, & percents, including multi-step problems involving percent increase & percent decrease, & financial literacy problems *(proportionality)*	8.12(D) calculate & compare simple interest & compound interest earnings	A.3(B) calculate the rate of change of a linear function represented tabularly, graphically, or algebraically in context of mathematical and real-world problems *(linear functions, equations and inequalities)*
				A.4(B) compare & contrast association & causation in real world problems *(linear functions, equations and inequalities)*
				2A.6(H) formulate rational equations that model real-world situations *(Cubic, cube root, absolute value and rational functions, equations, and inequalities)*

NOTE: Some long strand standards are included conceptually across strands. Original strand is identified in *italics* .

HOW?


ESY?
small group intervention
proactive vs. reactive
access to tier I

think along PLAN

Day	Do	Discuss	Dive In
Make a plan Monday process	Explore it (problem/text/ stimulus)	What will help you get started?	Build/Activate Schema
Tell me what you know Tuesday content	Talk about it	What will help you understand or remember the important stuff?	Find the Answer Visuals & Supplemental Aids
Work it out Wednesday process	Defend it	How can you show what you know?	Multiple Representations & Academic Vocabulary
Think it up Thursday	Change it	How does this connect to what you already know?	Compare & Contrast
Follow-up Friday	Reflect on it	How will you know yourself better as a learner?	Student Learning Report Sorting Cards

next steps

the who	o Who is designing specially designed instruction? o Where are special educators implementing instruction? o What is the instructional role of paraprofessionals? o Who are the instructional leaders for special educators? o Who supports and grows instructional skills in special educators and paraprofessionals? o Who is supporting special educators with administrative and ARD tasks?
the what	o How do special educators make decisions about interventions and instructional approaches? o How do special educators access general education/tiered/4545 intervention resources? o Do special educators understand the relationship of the standards to instruction? o Can special educators design specially designed instruction around priority standards?
the how	o How do special educators support access to tier I? o How do classroom teachers support access to tier i? o When are instructional decisions made for students with disabilities? Are those decisions proactive or reactive? o How is small group intervention and instruction for students with disabilities designed? When and where does it take place? o How can we think differently about ESY for students who regress in reading?