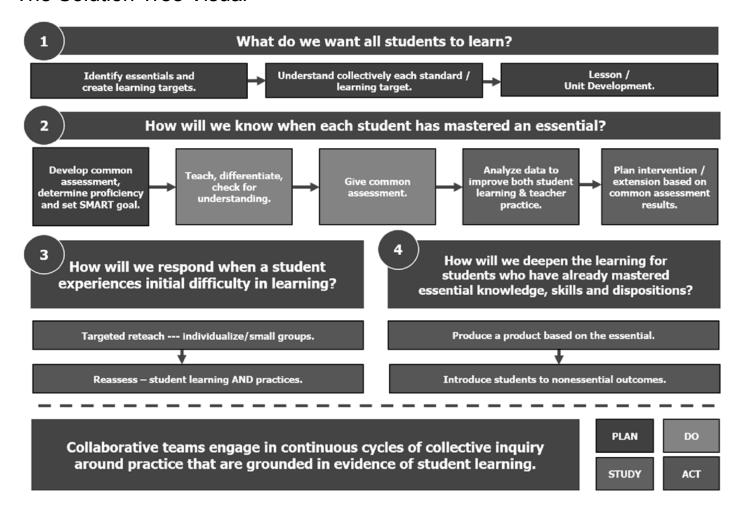
Bowie MS Guide to the PLC Process

The Solution Tree Visual



Step 1: Unit 1 Unpacking Essential Standards

Essential Standards (2)

Unpacking Standards and Creating Daily Lesson Objectives

Step 1: Break down SE into lists of K+S.

Step 2: Solve assessment items, making note of steps.

*How to use estimation to justify reasonableness

of answers.

Step 3: Adjust initial list of K+S based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

Step 5: Adjust language of K+S to reflect criteria of a daily objective.

Do It: Unit 1 Unpacking Standards

STEP 1: Unpack SE into Knowledge + Skills Chart						
Knowledge (Know)	Skills (Show)					
7.3A add, subtract, multiply, and divide rational numbers fluently 7.3 B apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers	7.3A add, subtract, multiply, and divide rational numbers fluently Do the following with different combinations of rational numbers: • Add • Subtract • Multiply • Divide					
Rational Number Vocabulary: Denominator, difference, improper fraction, mixed number, numerator, operation, rational number, simplest form, sum, place value, dividend, division, divisor, factor, product, quotient, reciprocal, opposite, negative, value, expression, natural number, whole number, integer.	7.3 B apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers. Apply different combinations of operations to solve problems.					

STEP 2: Solve the Assessment Items

Solve the assessment items under <u>Released STAAR Items</u>. Show all of your work and list the steps you take to solve each item. Link:

7.3A

What is the value of the expression 26.95 \div -5 $\frac{1}{2}$?

- F -0.49
- G -4.9
- H -3.3
- J -5.3

What is the value of the expression $6\frac{3}{4}(-11.5)$?

- **F** $77\frac{5}{8}$
- **G** $69\frac{3}{4}$
- **H** $-77\frac{5}{8}$
- **J** $-69\frac{3}{4}$

7.3B

Members of the chess club held a bake sale to raise money. Cupcakes and cookies were sold.

- · Cupcakes were sold for \$1 each.
- · Cookies were sold for \$0.50 each.
- · The members sold a total of 288 items.
- Of the items sold, $\frac{2}{3}$ were cupcakes and the remaining items were cookies.

How much money did the chess club members raise from the cookies that were sold?

- A \$72.00
- B \$96.00
- C \$48.00
- D \$45.00

Fatima paid for 5 pallets of grass to be delivered.

- Each pallet of grass cost \$129.95.
- Fatima paid \$76.20 for delivery.

What is the total amount Fatima paid?

- A \$725.95
- **B** \$649.75
- **C** \$581.95
- **D** \$1,030.75

STEP 3: Add to your K + S Chart

© Go back and add to your K+S chart above, based on your experience solving the assessment items.

<u>Step 4: Sequence list of K+S in order that leads to mastery.</u>

- 1. Understanding the classification of numbers.
- 2. Make sure students understand place value.
- 3. Estimation
- 4. Integer Rules
- 5. Fraction and Decimal Operations (Converting mixed to improper/decimal rules)
- 6. Simplify/Equivalence (Understanding relationships between numbers in different forms)
- 7. Skill to word problems
- 8. Real World Application

Step 5: Adjust language of K+S to reflect criteria of a daily objective.

See IPC

Unit 2 Unpacking Essential Standards (1-3 Standards)

Essential Standards (3)

involving:

percent increase.

Unpacking	Standards	and Creating	Daily	Lesson Ob	iectives
9			,,		

Step 1: Break down SE into lists of K+S.

Step 2: Solve assessment items, making note of steps.

Step 3: Adjust initial list of K+S based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

Step 5: Adjust language of K+S to reflect criteria of a daily objective.

Do It: Unit 2 Unpacking Standards

STEP 1: Unpack SE into Knowledge + Skills Chart	
Knowledge (Know)	Skills (Show)
7(4)(B) calculate unit rates from rates in mathematical and real-world problems. How to calculate unit rates from: • rates in mathematical problems. • rates in real-world problems.	7(4)(B) calculate unit rates from rates in mathematical and real-world problems. Calculate unit rates by multiplying and dividing: • Whole Numbers • Fractions
Vocabulary: Equations, inverse operations, Ratios, Rates, Proportions, Unit Rates.	Decimals
Equivalent forms of numbers. How to simplify.	7(4)(D) solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and
7(4)(D) solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems. How to solve problems involving: • ratios, including multi-step problems	 percent decrease, and financial literacy problems. Solve: to find a value that answers a question and/or makes an equation true by using Division Multiplication

Equations

Percent Proportions

- o percent decrease.
- o financial literacy problems.
- rates, including multi-step problems involving:
 - o percent increase.
 - percent decrease.
 - financial literacy problems
- percents, including multi-step problems involving:
 - percent increase.
 - o percent decrease.
 - financial literacy problems.

Vocabulary: Percents, Percent Increase, Decrease, Income Tax, Sales Tax Rate, Sales Tax, Discounts, Coupon, Tip, Rebate.

How to make comparisons using:

- unit rates
- discounts

7(5)(C) solve mathematical and real-world problems involving similar shape and scale drawings.

Vocabulary: Attribute, congruent, similar, corresponding sides (proportional), proportion, ratio, real-world problem, scale drawing, scale factor, scale.

Statements:

All sides are proportional.

All angles are congruent.

Similar figures have the same shape and different sizes.

Transformation Language:

- Translate (Slide)
- Rotate (Turn)
- Reflect (Flip)
- Dilate (Make bigger or smaller)

How to use Patty Paper to manipulate similar shapes.

How to decompose inscribed shapes.

- \circ Part/Whole = x/100
- Percent (%) increase/decrease using the formulas:
 - \circ Change/original = x/100
 - Change/original x 100
- How to convert Percents to decimal
- Correct Proportions Setup:
 - Part to part
 - o Part to whole
 - o Cross multiplication and division
 - WON Charts
- Correct Use of Proportions to Solve Problems Using:
 - Inverse Operations
 - Scale Factors
 - Number Lines

7(5)(C) solve mathematical and real-world problems involving similar shape and scale drawings.

Solve: to find a value that answers a question and/or makes an equation true by using

- Proportions (3 Ways to Solve)
 - Inverse Operations
 - Scale Factors
 - o Number Lines
- Similar Figure Statements
- mathematical problems involving similar shape drawings.
- real-world problems involving similar shape drawings or models and a given Scale.

STEP 2: Solve the Assessment Items

Solve the assessment items under <u>Released STAAR Items</u>. Show all of your work and list the steps you take to solve each item. Link:

7(4)(B) calculate unit rates from rates in mathematical and real-world problems.



STAAR Released Questions

2016

- Tareq pays \$22.10 for 2.6 pounds of salmon. What is the price per pound of the salmon?
 - A. \$57.46
 - B. \$8.50
 - C. \$19.50
 - D. \$24.70



7.48

2017

12. José paid \$47.00 for 4 movie tickets. Each ticket cost the same amount. What was the cost of each movie ticket in dollars and cents?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

Hector paid \$105 for 6 tickets to a hockey game. Each ticket cost the same amount.

What was the cost of each ticket in dollars and cents?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

7.4(B) calculate unit rates from rates in mathematical and real-world problems



2019 – Q36

A worker uses 450 inches of steel wire to make 300 springs of the same size. At this rate how many inches of steel wire are needed to make 1 spring?

- **F** $\frac{1}{3}$ in.
- $G = \frac{1}{15}$ in.
- $H = \frac{2}{3}$ in.
- **J** $1\frac{1}{2}$ in.

7(4)(D) solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems.



7.41

2016

- 15. Yvette uses 6 grams of tea leaves to make 24 fluid ounces of tea. Last week she made 288 fluid ounces of tea. How many grams of tea leaves did Yvette use to make tea last week?
 - A. 0.5 g
 - B. 1,152 g
 - C. 72 g
 - D. 2 g



7.4D

2016

- 48. The price of a television was reduced from \$250 to \$200. By what percentage was the price of the television reduced?
 - F. 20%
 - G. 25%
 - H. 80%
 - J. 50%
- Russell has a collection of 1,200 pennies. Of these pennies, 25% are dated before 1980, 35% are dated from 1980 to 2000, and the rest are dated after 2000.

How many pennies in Russell's collection are dated after 2000?

- F. 480
- G. 720
- H. 40
- J. 60



2021

The owner of a bookstore buys used books from customers for \$1.50 each. The owner then resells the used books for 400% of the amount he paid for them.

What is the price of a used book in this bookstore?

- F. \$5.50
- G. \$4.00
- H. \$2.10
- J. \$6.00
- 14 A bookstore offered mystery bags each containing 12 books. The quantity of each type of book was the same in each mystery bag. A shopper bought 3 mystery bags and found that 6 books were spy novels.

Based on this information, which prediction can the shopper make about buying mystery bags in the future?

- **F** There will be 4 more spy novels in 8 bags than in 6 bags.
- **G** There will be 2 more spy novels in 6 bags than in 4 bags.
- **H** There will be 1 more spy novel in 9 bags than in 8 bags.
- J There will be 6 more spy novels in 10 bags than in 8 bags.

29 The manager of a coffee shop recorded the number of customers who put vanilla creamer or chocolate creamer in their coffee during one hour and classified them by age. The results are shown in the table.

Coffee Creamer

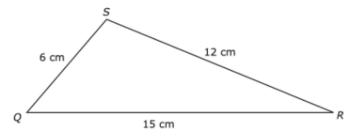
	Vanilla	Chocolate
Age 18-30	2	6
Age 31+	4	8

What percentage of these customers put chocolate creamer in their coffee during this hour?

- A 30%
- **B** 14%
- C 70%
- **D** 75%

7(5)(C) solve mathematical and real-world problems involving similar shape and scale drawings.

Triangle QRS and its dimensions are shown.



Which measurements in centimeters represent the dimensions of a triangle that is similar to triangle *QRS*?

- A 8 cm, 14 cm, 17 cm
- **B** 10 cm, 20 cm, 25 cm
- C 4 cm, 10 cm, 13 cm
- D 12 cm, 24 cm, 36 cm

An engineer created a scale drawing of a building using a scale in which 0.25 inch represents 2 feet. The length of the actual building is 250 feet.

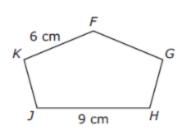
What is the length in inches of the building in the scale drawing?

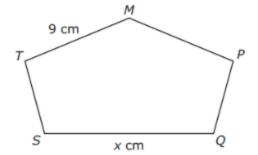
Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

A building has a height of 125 meters and a length of 80 meters. On a scale drawing of the building, the height is 25 centimeters.

What is the length of the building on the scale drawing in centimeters?

- F 55 cm
- G 16 cm
- H 20 cm
- J 64 cm
- 19 Pentagon FGHJK is similar to pentagon MPQST.

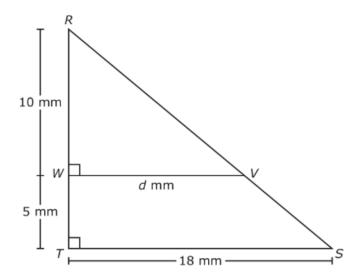




What is the value of x?

- A 13.5
- B 12
- C 9.5
- D Not here

Triangle RST is similar to triangle RVW.



What is the value of d in millimeters?

- A 27 mm
- **B** 12 mm
- **C** 9 mm
- **D** 13 mm

STEP 3: Add to your K + S Chart

☑ Co back and add to your K+S chart above, based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

7.4B/D

- 1. Vocabulary Instruction through notetaking.*
- 2. Ratios*
- 3. Proportions*
- 4. Rates*
- 5. Unit Rates*
- 6. Unit Rate Comparisons*
- 7. Equivalent forms of numbers: Fraction, decimal and percent relationships.*
- 8. Percents of Numbers*
- 9. Percent Increase & Decrease*
- 10. Financial Literacy*
- 11. Discount Comparisons*
- *All Knowledge and Skills are presented using real-world contexts.

7.5C

- 1. Vocabulary Instruction through notetaking.
 - a. How to use mathematical statements.
 - b. Transformation Language.

2.	_	proportions to find missing length Using Similar Figure Statements (Corresponding Sides)
	b.	Using Patty Paper to manipulate similar figures.
	C.	Decomposing inscribed shapes.
3.	Real-	world problems involving similar shape drawings and models:
	a.	Unit rates
	b.	Proportions
	C.	Using given scales.
	<u>: Adju</u> See IP	st language of K+S to reflect criteria of a daily objective.

Unit 3 Unpacking Essential Standards (1-3 Standards)

Essential Standards (3)

Unpacking	g Standards aı	nd Creatina	Daily I	Lesson Obi	ectives
• · · · · · · · · · · · · · · · · · · ·	,				

Step 1: Break down SE into lists of K+S.

Step 2: Solve assessment items, making note of steps.

Step 3: Adjust initial list of K+S based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

Step 5: Adjust language of K+S to reflect criteria of a daily objective.

Do It: Unit 3 Unpacking Standards

STEP 1: Unpack SE into Knowledge + Skills Chart	
Knowledge (Know)	Skills (Show)
7.4(A) represent constant rates of change in mathematical and real world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d = rt.	7.4(A) represent constant rates of change in mathematical and real world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d = rt.
Vocabulary: constant rates of change, table, graph, verbal statement, algebraic representation.	 → Calculate constant rate of change in mathematical and real-world problems for different representations including: ◆ Pictorial
Prior knowledge: Unit Rates, understand meaning of mathematical problems (numbers and operations),	◆ Tabular◆ Verbal◆ Numeric◆ Graphical
Read and comprehend real world problems.	◆ Algebraic, including d = rt
7.7(A) represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b.	 7.7(A) represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b. Slope from a graph using rise/run

How to write in slope intercept form using y = mx + b from descriptions, tables, graphs, and equations.

Vocabulary: slope, y-intercept, slope intercept form, tables, graphs, equations, per, each, every, rise, run, up, down, left, right, positive, negative

7.11(A) model and solve one-variable, two-step equations and inequalities

Vocabulary: Determine, model, coefficient, variable, constant, equation, expression, math operation symbols, inequality, equal sign, greater than, greater than or equal to, less than, less than or equal to.

Prior knowledge:

Students previously solved one-step equations and inequalities.

Understand the difference between equations and inequalities.

- Rise = up +, down -
- o Run = right +, left -
- slope from a table using change in y/change in x
 - Using addition or subtraction between x values and y values
- slope from a description/equation using words that represent "mx"
 - Per ex. 5 per week (5x)
 - Each ex. 6 each (6x)
 - Every ex. Loses \$7 a month (-7x)
 - Monthly ex. \$20 monthly (20x)

7.11(A) model and solve one-variable, two-step equations and inequalities

Modeling Equations and Inequalities:

- Show the difference between variables and constants using algebra tiles
- Translate between the algebra tiles model and mathematical variables and constants

Solving one-variable, two-step equations and inequalities.

Solving Equations and Inequalities:

- Using distributive property
- Substituting into equation
- "Golden Rule" if you multiply or divide by a negative #, you must flip the inequality sign
- Solving equations and inequalities using inverse operations
- Isolate the variable by using inverse operations.
- Write inequalities scenarios for both inclusive (>) and exclusive (>) values.

STEP 2: Solve the Assessment Items

Solve the assessment items under <u>Released STAAR Items</u>. Show all of your work and list the steps you take to solve each item. Link:

7.4(A) represent constant rates of change in mathematical and real world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d = rt.

- 34. Caroline's cell phone plan costs \$32 per month. Which table shows the sum of the amounts that Caroline will pay for her cell phone plan over the next 4 months?
 - F. Caroline's Cell Phone Plan

Month	1	2	3	4
Total Amount Paid	\$0	\$32	\$64	\$96

G. Caroline's Cell Phone Plan

Month	1	2	3	4
Total Amount Paid	\$8	\$16	\$24	\$32

H. Caroline's Cell Phone Plan

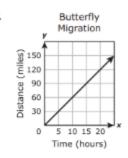
Month	1	2	3	4
Total Amount Paid	\$32	\$36	\$40	\$44

J. Caroline's Cell Phone Plan

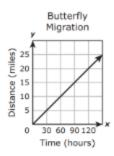
Month	1	2	3	4
Total Amount Paid	\$32	\$64	\$96	\$128

54. During migration, a butterfly can travel 30 miles in 1 hour. Which graph best represents y, the number of miles a butterfly can travel in x hours?

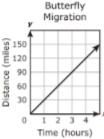
F



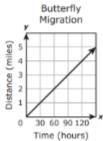
н.



G.



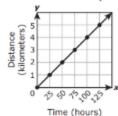
J.



- 11. A dolphin travels through the water at a speed of 25 kilometers per hour. Which representation shows the distance a dolphin can travel at this rate?
 - A. Distance Traveled by a Dolphin

Time (hours)	Distance (kilometers)
0	0
2	50
4	100
6	150
8	200

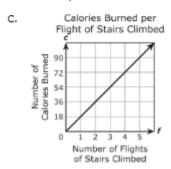
- B. y = x + 25, where x represents the time in hours and y represents the distance in kilometers
- C. Distance Traveled by a Dolphin



- D. In 5 hours a dolphin can travel a distance of 135 kilometers.
 - 23. Which answer choice represents a person burning 90 calories by climbing 18 flights of stairs?
 - A. Calories Burned per Flight of Stairs Climbed

Number of Flights of Stairs Climbed, f	Number of Calories Burned, c
1	5
3	15
5	25
7	35

B. c = f + 5, where c represents the number of calories burned and f represents the number of flights of stairs climbed



D. A person who climbs 5 flights of stairs will burn 1 calorie.

7.7(A) represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b.

40. Nicholas is buying shirts for his baseball team. He will pay \$9.50 for each shirt plus a one-time fee of \$22.50 for the design.

Which equation can be used to find y, the total cost to buy x shirts?

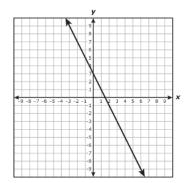
F.
$$y = 9.5x + 22.5$$

G.
$$y = 22.5x + 9.5$$

H.
$$y = 9.5x 22.5$$

J.
$$y = 22.5x 9.5$$

20. Which equation best represents the relationship between ${\bf x}$ and ${\bf y}$ in the graph?



F.
$$y = 3x - 2$$

G.
$$y = -\frac{1}{2}x + 3$$

H.
$$y = -2x + 3$$

J.
$$y = 2x + \frac{3}{2}$$

47.	Which table contains only values that satisfy the equation
	y = 0.5x + 14?

C.

Α.	X	У
	0	0
	5	35
	10	70
	15	105
	20	140

X	У
0	14
5	16.5
10	19
15	21.5
20	24

В.	X	У
	0	14
	5	39
	10	64
	15	89
	20	114

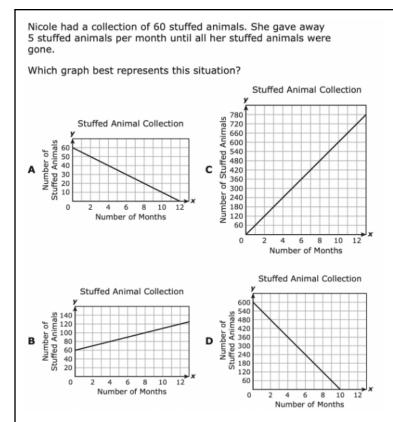
38. A pilot takes a taxi from the airport to a hotel. The taxi driver charges a \$2.50 initial charge plus \$2.65 per mile. Which equation can be used to find *y*, the total cost of the trip, if *x* represents the number of miles of the trip?

F.
$$y = 2.50x + 2.65$$

G.
$$y = 2.65(x + 2.50)$$

H.
$$y = 2.65x - 2.50$$

J.
$$y = 2.65x + 2.50$$



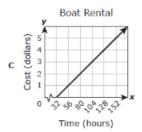
The table shows the relationship between, y, the cost to rent a boat, and x, the amount of time the boat is rented.

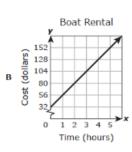
Boat Rental Costs

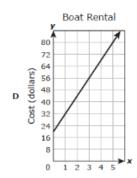
Time, x (hours)	Cost, y (dollars)
1	32
3	56
5	80
7	104

Which graph best represents the relationship between x and y shown in the table?



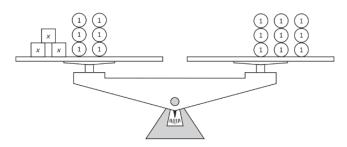






7.11(A) model and solve one-variable, two-step equations and inequalities

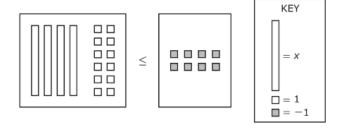
28. The model represents an equation.



What is the solution for this equation?

- A. x = 3
- B. x = 15
- C. x = 5
- D. x = 1

18. The model represents an inequality.



What is the solution set for the inequality?

- F. $x \le -5$
- G. $x \le 5$
- H. $x \le 1$
- J. $x \le -14$
- 7. What is the solution set for $-4x 10 \le 2$?
 - A. $x \le -3$
 - B. $x \ge -3$
 - C. $x \le 2$
 - D. $x \ge 2$
- 12. What is the solution to this equation?

$$2x + 10 = 28$$

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

STEP 3: Add to your K + S Chart

☑ Go back and add to your K+S chart above, based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

7.4A

- 1. Vocabulary Instruction through notetaking.*
- 2. Understanding the coordinate plane components and how it works.
- 3. Multi-Representations:
 - a. Graphs (ordered pairs)

b. Input-Output Tables c. Equations: • Interpret the unit rate as the rate of change (m = Change in outputs/change in inputs) • Constant of proportionality of the line (k = y/x). Rate (r) = Distance(d)/Time (t) d. Verbal Statements *Knowledge and Skills using real-world contexts. 7.7A 1. Vocabulary Instruction through notetaking.* 2. Mastery of 7.4A. 4. Multi-Representations: a. Graphs (ordered pairs) b. Input-Output Tables c. Equations: • Interpret the unit rate as the rate of change (m = Change in outputs/ change in inputs) • Constant of proportionality of the line (k = y/x). • Understanding the meaning of the formula: y = mx + b M = rate of change B = y - intercept (Initial Value) d. Verbal Statements *Knowledge and Skills using real-world contexts. **7.11A** 1. Vocabulary Instruction through notetaking.* 3. Modeling equations 4. Translating equations 5. Solving equations a. Use Inverse Operations to isolate the variable. b. Use Integer Rules 6. Modeling inequalities 7. Translating inequalities 8. Solving inequalities a. Use Inverse Operations to isolate the variable. b. Use Integer Rules • Know when to change direction of inequality symbol (Golden Rule). 9. Writing Equations & Inequalities from verbal statement, vice versa. a. Mastery of 7.7A

Step 5: Adjust language of K+S to reflect criteria of a daily objective.

*Knowledge and Skills using real-world contexts.

☐ See IPC

Unit 4 Unpacking Essential Standards

Essential Standards (4)

Unpacking Standards and Creating Daily Lesson Objectives

Step 1: Break down SE into lists of K+S.

Step 2: Solve assessment items, making note of steps.

Step 3: Adjust initial list of K+S based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

Step 5: Adjust language of K+S to reflect criteria of a daily objective.

Do It: Unit 3 Unpacking Standards

STEP 1: Unpack SE into Knowledge + Skills Chart

Knowledge (Know)

*Steps to Solve:

- 1) Identify shapes, key words, and what the question is asking
- 2) Create an organizer
- 3) Write down formulas and Identify variables needed
 - (A, B, C, b, h, d, r, r²,π, b1, b2)
- 4) Plug in numbers into formula
- 5) Answer the question (circle back to #1)

7(9)(B) determine the circumference and area of circles.

Prior knowledge:

Represent and solve problems related to perimeter and/or area of rectangles, parallelograms, trapezoids, and triangles.

- Relationship between radius and diameter $(r = \frac{d}{2})$.
- Master 7(5)B describe pi as the ratio of the circumference to the diameter:
 - That pi (π) is the ratio between Circumference and diameter $(\pi = \frac{C}{d})$ and $\pi = \frac{C}{2r}$.

Skills (Show)

7(9)(B) determine the circumference and area of circles.

- Solve problems involving the circumference and area of circles
 - Use the correct formula to find the area or circumference of circles

7(9)(C) determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles

- Solve problems involving the area of Composite figures
 - Identify the shape(s)

- How to Read and comprehend real world problems including the meanings of circumference and area of circles.
- Difference between circumference and area of a circle
- How to add, subtract, multiply and divide rational numbers.
- Meaning of the symbol π (pi) and its approximations (3.14).
- Understand, identify and correctly use the formulas for Circumference and area of circles located on the reference sheet.

Formulas for:

- Circumference $C = d\pi$ or $C = 2\pi r$
- Area of a Circle $A = \pi r^2$

Vocabulary:

Formula, diameter, radius, circumference, pi, ratio, area.

7(9)(C) determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles

Prior knowledge:

Students should know formulas for Area (A) of:

- Rectangles, Squares, parallelograms:
 A = Iw or A=bh
- Trapezoids: A = ½ (b1 + b2)h
- Triangles: A = ½ bh

Formulas for Area of:

- Semi-Circles A = $\frac{\pi r^2}{2}$
- Quarter-Circles A = $\frac{\pi r^2}{4}$

Vocabulary: Determine, Area, length, width, base, height, square units, estimate, composite, rectangle, square, parallelogram, trapezoid, triangle, shaded region = subtraction

7(9)(D) solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and

- Use the correct formula to find the area of each shape
 - Use an organizer such as a T-Chart, to separate areas of each shape.
- Add or subtract areas to answer the question given.

7(9)(D) solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and triangular pyramid by determining the area of the shape's net.

- Solve problems involving the lateral and total surface area
 - Identify the shape(s)
 - Use the correct formula to find the area of each shape
 - Use an organizer such as a T-Chart, to separate areas of each shape.
 - Add areas to answer the question given.

7(9)(A) solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids;

- Solve problems involving the volume of:
 - Rectangular prisms
 - o Triangular prisms
 - Rectangular pyramids
 - Triangular pyramids
 - Identify the formula to use and the "B" and "h" as it pertains to the question given.

triangular pyramid by determining the area of the shape's net.

- Master 7.9C
- Differentiate the difference between lateral surface area (faces no bases) and total surface area (faces + bases)

Vocabulary: Lateral surface area, rectangular prism, rectangular pyramid, surface area, triangular prism, triangular pyramid, net

Prior knowledge:

Students should know how to determine solutions for problems involving the area of volume of right rectangular prisms where dimensions are positive rational numbers.

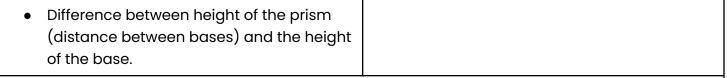
7(9)(A) solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids;

Vocabulary: volume, rectangular prisms (4 rectangular lateral faces + 2 rectangular bases), triangular prisms (3 triangular lateral faces + 2 triangular bases), rectangular pyramids (4 triangular lateral faces + 1 rectangular base),triangular pyramids (3 triangular lateral faces + 1 triangular base), lateral faces, bases, area, height

Prior knowledge:

In 6th grade, students solved problems involving the volume of rectangular prisms only. They are not familiar with finding the volume of other shapes.

- How to reference formulas
- Add, subtract, multiply and divide rational numbers.
- Difference between "b" and "B"
 b= base, B= area of the base



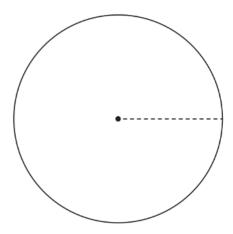
STEP 2: Solve the Assessment Items

Solve the assessment items under <u>Released STAAR Items</u>. Show all of your work and list the steps you take to solve each item. Link:

7(9)(B) determine the circumference and area of circles.

- 37. A circle has a diameter of 7.6 feet. Which measurement is closest to the circumference of the circle in feet?
 - A. 23.9 ft
 - B. 45.3 ft
 - C. 47.7 ft
 - D. 11.9 ft
- 46. Jennifer painted a tabletop that is shaped like a circle. The circumference of the tabletop is 6π feet. Which measurement is closest to the area of the tabletop in square feet?
 - A. 18.84 ft²
 - B. 28.26 ft²
 - C. 37.68 ft²
 - D. 113.04 ft²
- 8. A circular tablecloth has a radius of 2.5 feet. Kyle is sewing a piece of ribbon around the edge of the tablecloth. If Kyle has exactly enough ribbon, which measurement is closest to the length of the piece of ribbon in feet?
 - F. 7.85 ft
 - G. 15.7 ft
 - H. 19.63 ft
 - J. 31.4 ft

25. Use the ruler provided to measure the radius of the circle to the nearest half centimeter.



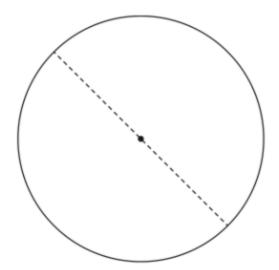
Which measurement is closest to the area of the circle in square centimeters?

- A. 153.86 cm²
- B. 43.96 cm²
- C. 21.98 cm²
- D. 38.47 cm²

7(9)(C) determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles

2022 - Q13

13 Use the ruler provided to measure the dimensions of the circle to the nearest centimeter.



Which measurement is closest to the circumference of the circle in centimeters?

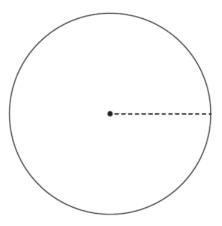
- A 154 cm
- **B** 11 cm
- C 22 cm
- **D** 38 cm

The radius of circle S is half the radius of circle L. The radius of circle L is 8 millimeters.

Which measurement is closest to the area of circle ${\cal S}$ in square millimeters?

- **F** 50.24 mm²
- **G** 25.12 mm²
- **H** 200.96 mm²
- **J** 12.56 mm²

Use the ruler provided to measure the radius of the circle to the nearest half centimeter.



Which measurement is closest to the area of the circle in square centimeters?

- A 153.86 cm²
- **B** 43.96 cm²
- C 21.98 cm²
- D 38.47 cm²

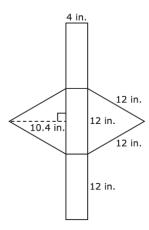
The diameter of circle *X* is 15 centimeters. The diameter of circle *Y* is 20 centimeters.

Which measurement is closest to the difference between the circumference of circle X and the circumference of circle Y in centimeters?

- **A** 15.7 cm
- **B** 7.85 cm
- C 137 cm
- D 31.4 cm

7(9)(D) solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism, and triangular pyramid by determining the area of the shape's net.

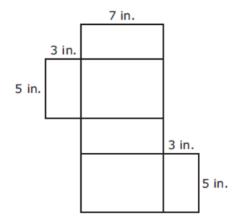
The net of a triangular prism and its approximate dimensions are shown in the diagram.



Which measurement is closest to the total surface area of the triangular prism in square inches?

- **F** 268.8 in.²
- **G** 432 in.²
- **H** 288 in.²
- **J** 393.6 in.²

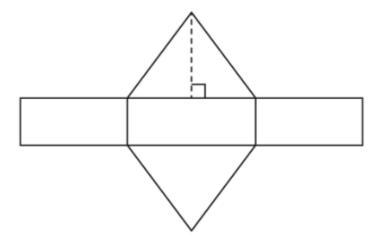
The dimensions of a rectangular prism are given in the net shown.



What is the total surface area of the rectangular prism in square inches?

- F 71 in.²
- **G** 58 in.²
- H 142 in.²
- J 105 in.²

The net of a triangular prism is shown. Use the ruler provided to measure the dimensions of the net to the nearest half centimeter.

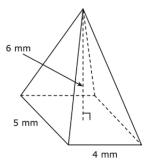


Which measurement is closest to the total surface area of the triangular prism in square centimeters?

- **A** 20 cm²
- **B** 14 cm²
- **C** 8 cm²
- \mathbf{D} 6 cm²

7(9)(A) solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids;

The dimensions of a rectangular pyramid are shown in the diagram.



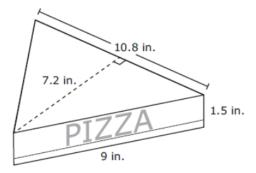
What is the volume of the rectangular pyramid in cubic millimeters?

- **A** 15 mm³
- **B** 120 mm³
- **C** 60 mm³
- **D** 40 mm³

The dimensions of a rectangular prism are 1.5 feet by 3.5 feet by 2 feet. What is the volume of the rectangular prism in cubic feet?

- \mathbf{F} 7 ft³
- **G** 7.25 ft^3
- **H** 8.5 ft³
- **J** 10.5 ft³

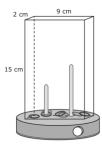
A container in the shape of a triangular prism is used to hold a slice of pizza. The dimensions of the container are shown in the diagram.



What is the volume of the container in cubic inches?

- A 58.32 in.3
- B 116.64 in.3
- C 19.44 in.3
- D 28.5 in.3

A ringtoss toy is composed of a rectangular prism on top of a cylinder. The rectangular prism is completely filled with water. The dimensions of the rectangular prism are shown in the diagram.



What is the volume of the rectangular prism in cubic centimeters?

- **A** 26 cm³
- **B** 270 cm³
- **C** 165 cm³
- **D** 348 cm³

16 What is the volume of the triangular prism shown below?

13 cm

13 cm

A 143 cm³

B 312 cm³

STEP 3: Add to your K + S Chart

Co back and add to your K+S chart above, based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

7.9B

- Vocabulary instruction through notetaking & interactivities.
- Master 7.5B

C 156 cm³

D Not here

- Identifying the formula on the STAAR materials sheet and the variables within the formula
- Find Circumference & Area using **Steps to Solve**:
 - 1. Identify shapes, key words, and what the question is asking
 - 2. Create an organizer
 - 3. Write down formula(s)
 - 4. Identify variables (r, r^2, π, a, d) and plug in numbers into formula
 - 5. Answer the question (circle back to #1)

7.9C

- Vocabulary instruction through notetaking & interactivities.
- Master 7.9B
- Identifying the formula on the STAAR materials sheet and the variables within the formula
- Find Area of Composite Figures using Steps to Solve:
 - 1. Identify shapes, key words, and what the question is asking

- 2. Create an organizer
- 3. Write down formula(s)
- 4. Identify variables (B, b, h, r^2 , π , b1, b2) and plug in numbers into formula
- 5. Answer the question (add or subtract areas)

7.9D

- Vocabulary instruction through notetaking & interactivities.
- Master 7.9C
- Identifying the formula on the STAAR materials sheet and the variables within the formula
- Find Lateral & Surface Area of Prisms and Pyramids using **Steps to Solve:**
 - 1. Identify shapes, key words, and what the question is asking
 - 2. Create an organizer
 - 3. Write down formula(s)
 - 4. Identify variables (A, b, h) and plug in numbers into formula
 - 5. Answer the question (add areas)

7.9A

- Vocabulary instruction through notetaking & interactivities.
- Master 7.9C
- Identifying the formula on the STAAR materials sheet and the variables within the formula
- Find Volume of Triangular and Rectangular Prism & Pyramids using **Steps to Solve:**
 - 1. Identify shapes, key words, and what the question is asking
 - 2. Create an organizer
 - 3. Write down formula(s)
 - 4. Identify variables (V, B, b, h) and plug in numbers into formula
 - 5. Answer the question (add or subtract areas)

Step 5: Adjust language of K+S to reflect criteria of a daily objective.	
☐ See IPC	

Unit 5 Unpacking Essential Standards (3)

Unpacking Standards and Creating Daily Lesson Objectives

Step 1: Break down SE into lists of K+S.

Step 2: Solve assessment items, making note of steps.

Step 3: Adjust initial list of K+S based on your experience solving the assessment items.

Step 4: Sequence list of K+S in order that leads to mastery.

Step 5: Adjust language of K+S to reflect criteria of a daily objective.

Do It: Unit 3 Unpacking Standards

STEP 1: Unpack SE into Knowledge + Skills Chart

Knowledge (Know)

7.6(H) solve problems using qualitative and quantitative predictions and comparisons from simple experiments

Vocabulary: compound event, data, dependent event, equally likely, experimental data, experimental probability, inference, independent event, less likely, more likely, outcome, population, prediction, probability, qualitative data, quantitative data, random sampling/random sample, simple event, solution, theoretical probability.

- How to set up proportional relationships to make predictions.
- Difference between independent and dependent compound events.
- Collected data is used for experimental probabilities.
- Sample spaces are used for theoretical probabilities.

7.6(I) determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces

Skills (Show)

7.6(H) solve problems using qualitative and quantitative predictions and comparisons from simple experiments

- Calculate the probability of a simple event.
- Set up equations to represent the probability of events taking place.
- Solve problems using:
 - Predictions with words and numbers from simple experiments.
 - Comparisons with words and numbers from simple events.

7.6(I) determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces

- Use Data and Sample Spaces to calculate:
 - experimental probabilities related to simple events.

Vocabulary: Experimental probability,
Theoretical probability, Simple events,
Compound events, Data Set, Sample Spaces,
Complement, Dependent Event, Independent
Event, Event, Outcome, Probability, Random,
Simulation, Tree diagram.

Prerequisites:

- How to Multiply fractions
- How to Simplify fractions
- A coin has 2 sides (Heads and Tails)
- A die has 6 sides labeled 1 6.
- There are 52 cards in a deck containing 4 suits (Hearts, Clubs, Spades, Diamonds) that each have 13 cards.
- Marbles are made of a variety of colors.
- Simulations can be done by hand and with technology.
 - A variety of objects can be used.

7.6(G) solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents

Vocabulary: Bar graph, Circle graph, Pie chart, Comparison, Data, Dot plot, Line plot, Equivalent, Ratio, Part to part, Part to whole, Percent, Population, Problem, Sample, Biased, Unbiased

- How to recognize proportional relationships within data.
- How to represent information with different forms of rational numbers.
- Random Samples represent a population.
- All samples do not represent populations, samples can be biased.

- experimental probabilities related to compound events.
- theoretical probabilities related to simple events.
- theoretical probabilities related to compound events

7.6(G) solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents

- Solve problems using data represented in:
 - Bar Graphs
 - Part-to-whole comparisons
 - Part-to-part comparisons
 - Equivalents
 - Dot Plots
 - Part-to-whole comparisons
 - Part-to-part comparisons
 - Equivalents
 - o Circle Graphs
 - Part-to-whole comparisons
 - Part-to-part comparisons
 - Equivalents

STEP 2: Solve the Assessment Items

Solve the assessment items under <u>Released STAAR Items</u>. Show all of your work and list the steps you take to solve each item. Link:

(7.6H) solve problems using qualitative and quantitative predictions and comparisons from simple experiments

The table shows the numbers of bags of different flavors of potato chips on a store shelf. A customer will randomly select one bag of potato chips from the shelf.

Potato Chips

Flavor	Number of Bags
Plain	12
Jalapeño	18
Ranch	8
Cheese	20

Which statement about the flavor of the potato chips chosen is best supported by the information in the table?

- **F** The flavor is least likely to be plain.
- **G** The flavor is twice as likely to be jalapeño as ranch.
- **H** The flavor is equally likely to be plain, jalapeño, ranch, or cheese.
- J The flavor is more than twice as likely to be cheese as it is to be

The table shows the numbers of different colors of pencils in a pencil case. A student will randomly select one pencil from the pencil case.

Colored Pencils

Color	Number of Pencils
Red	2
Purple	8
Blue	4
Green	5

Based on the information in the table, which statement is true?

- **F** The pencil is least likely to be blue.
- **G** The pencil is 4 times as likely to be purple as it is to be red.
- **H** The pencil is equally likely to be blue or green.
- J The pencil is more likely to be purple than all other colors combined.

Mari bought 6 packets of tomato seeds. Each packet contained 24 seeds. She planted 1 packet of the seeds, and 15 seeds sprouted.

Which statement about the seeds in the remaining packets is best supported by this information?

- A No more than 50 seeds will sprout.
- B Between 50 and 100 seeds will sprout.
- C At least 100 but no more than 120 seeds will sprout.
- D All 120 seeds will sprout.

A store manager receives a delivery of 2 boxes of lightbulbs. Each box contains 25 lightbulbs. The store manager tests all the lightbulbs and finds that 2 of them are defective. Based on these results, what can the store manager predict about the next delivery of lightbulbs?

- F A delivery of 3 boxes will contain 3 more defective lightbulbs than a delivery of 2 boxes.
- **G** A delivery of 4 boxes will contain 2 more defective lightbulbs than a delivery of 2 boxes.
- H A delivery of 5 boxes will contain 10 more defective lightbulbs than a delivery of 2 boxes.
- J A delivery of 6 boxes will contain 3 more defective lightbulbs than a delivery of 2 boxes.

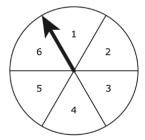
Justin has 50 pictures in an album. Of these pictures, 30 show his friends, 12 show his family, and 8 show only Justin. Justin is in $\frac{1}{2}$ of the pictures that show his friends and $\frac{1}{2}$ of the pictures that show his family.

Based on this information, which statement is true?

- A The probability of randomly selecting a picture that shows Justin with his friends is greater than the probability of randomly selecting a picture that shows Justin with his family.
- **B** The probability of randomly selecting a picture that shows Justin is 8%.
- **C** The probability of randomly selecting a picture that shows Justin with his family is 5 times the probability of randomly selecting a picture that shows only his friends.
- **D** The probability of randomly selecting a picture that does not show Justin is 21%.

7.6(I) determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces

A spinner with 6 equal sections is shown.



What is the probability of spinning a number greater than 4?

- **A** $\frac{1}{6}$
- **B** $\frac{2}{3}$
- $c_{\frac{1}{2}}$
- $D = \frac{1}{3}$

Regina has three number cubes. The faces of each number cube are numbered from 1 to 6. Regina will roll each number cube one time.

What is the probability that all three number cubes will land on an odd number?

- $F = \frac{1}{2}$
- $G^{\frac{1}{6}}$
- $H^{\frac{1}{3}}$
- $\frac{1}{8}$

Marco has two number cubes. The faces of each number cube are numbered from 1 to 6. Marco rolled the number cubes and recorded the number showing on the top face of each number cube. The results are shown in the table.

4, 2	5, 2	3, 1	3, 4	2, 6
1, 1	4, 2	2, 3	3, 3	5, 1
1, 5	5, 2	1, 5	1, 2	1, 5
2, 4	4, 2	2, 4	5, 3	2, 4

Based on these results, what is the experimental probability that the next time the number cubes are rolled, they will land with a 2 showing on the top face of one number cube and a 4 showing on the top face of the other number cube?

- $F = \frac{3}{10}$
- $G = \frac{11}{20}$
- $H = \frac{9}{20}$
- $\frac{1}{36}$

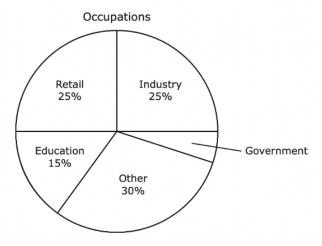
Nerissa has 5 pink bows, 1 blue bow, and 4 purple bows in a box. She will randomly choose 1 bow from the box.

What is the probability Nerissa will choose a purple bow?

- $F = \frac{1}{2}$
- $G = \frac{2}{5}$
- $H \frac{1}{10}$
- $\mathbf{j} = \frac{3}{5}$

7.6(G) solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents

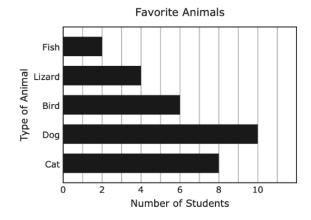
A survey was conducted to determine the types of occupations of the 1,200 residents of a town. The types of occupations are shown in the circle graph.



Based on the circle graph, how many more residents have an occupation in industry than have an occupation in government?

- **A** 20
- **B** 360
- C 240
- **D** 300

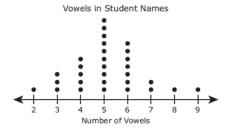
Students were surveyed to determine their favorite types of animals. The bar graph shows the number of students who selected each type of animal.



What percentage of the students surveyed selected "Bird" as their favorite type of animal?

- **F** 20%
- **G** 5%
- **H** 6%
- **J** 80%

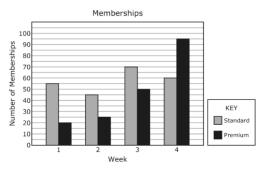
Ms. Gonzales gathered data on the number of vowels in the first and last names of each of her students. The data are shown in the dot plot.



What percentage of the students have 5 or more vowels in their first and last names?

- A 21%
- **B** 63%
- C 37%
- D 70%

A club sold standard and premium memberships. The graph shows the number of each type of membership sold over the last four weeks.



Which statement is supported by the information in the graph?

- **F** The number of premium memberships sold during Week 4 was 75% more than the number of premium memberships sold during Week 1.
- **G** The total number of memberships sold during Week 1 was equal to the total number of memberships sold during Week 2.
- H The number of premium memberships sold during Week 3 was 2 times the number of premium memberships sold during Week 2.
- J The total number of memberships sold during Week 4 was 35 less than the total number of memberships sold during Week 3.

STEP 3: Add to your K + S Chart

Go back and add to your K+S chart above, based on your experience solving the assessment items.

<u>Step 4: Sequence list of K+S in order that leads to mastery.</u>

7.61

- Vocabulary instruction through notetaking & interactivities.
- Review how to Multiply fractions
- Review how to Simplify fractions
- Provide Simulation Opportunities (Hands-On & With Technology)
 - o A coin toss (2 sides: Heads and Tails)
 - A die roll (6 sides: labeled 1 6).
 - Deck of Cards
 - 52 cards
 - 13 Hearts

- 13 Clubs
- 13 Spades
- 13 Diamonds
- Marbles in bag or jar (variety of colors)
- Use Data and Sample Spaces to calculate:
 - o theoretical probabilities related to simple events.
 - experimental probabilities related to simple events.
 - o theoretical probabilities related to compound events
 - o experimental probabilities related to compound events.

7.6H

- Vocabulary instruction through notetaking & interactivities.
- Master 7.6I
 - o Difference between independent and dependent compound events.
 - Collected data is used for experimental probabilities.
 - o Sample spaces are used for theoretical probabilities.
- Review how to set up proportional relationships to make predictions.
- Set up equations to represent the probability of events taking place.
- Solve problems using:
 - o Predictions with words and numbers from simple experiments.
 - o Comparisons with words and numbers from simple events.

7.6G

- Vocabulary instruction through notetaking & interactivities.
 - Emphasize that Random Samples represent a population.
 - All samples do not represent populations, samples can be biased.
- Master 7.6H
 - How to recognize proportional relationships within data.
 - How to represent information with different forms of rational numbers.
- Solve problems using data represented in:
 - Bar Graphs
 - Part-to-whole comparisons
 - Part-to-part comparisons
 - Equivalents
 - Circle Graphs
 - Part-to-whole comparisons
 - Part-to-part comparisons
 - Equivalents
 - Dot Plots
 - Part-to-whole comparisons

	Part-to-part comparisons Equivalents
Step 5: Adjust lang	guage of K+S to reflect criteria of a daily objective.

Step 2: Instructional Planning Calendar 2022-2023

1st Six Weeks Instructional Planning Calendar

(2nd Six Weeks Template) - 3rd Six Weeks Template)

Non-Negotiables: TEKS, Objective, DOL, Common Assessments, Flex Days,
*Cub Connection (After 2nd Period)

First Grading Period	* <u>Cub Connection (After 2nd Period)</u> irst Grading Period August 15 - September 23, 2022			
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
Aug 15- <u>LP</u>	16	17	18	19
FOCUS: SEL/Excel Cub Camp Objective (Student Friendly): I can learn about my teacher by listening to his/her "All About His/Her" presentation. I can become an expert in my class by participating in the Orientation (Cub Camp). I can explain why people get anxious about math. DOL: Students will reflect on who they are, complete CubCamp embedded assessments.	FOCUS: SEL/Excel Cub Camp Objective (Student Friendly): I can understand anxiety and how it personally impacts me by completing an anxiety checklist. I can become an expert in my class by completing the Classroom Routines & Procedures Scavenger Hunt. DOL: Students will practice CubCamp school-wide procedures.	FOCUS: SEL/Excel Objective (Student Friendly): I can understand myself and others by completing COMPASS Activity. I can start planning my future by completing a Career Interest Survey. I can EXCEL. I can ask questions and give my teacher feedback on my learning experience. DOL: Students will be able to explain their work preferences and styles in group settings. Students will use a career interest survey to choose a future career and master EXCEL Blooket.	FOCUS: SEL/Excel Objective (Student Friendly): I can explain how my brain can grow and change by participating in class discussion. I can demonstrate my readiness to learn Unit 1 Concepts by completing the Unit 1 Pre-Test. I can grow my mathematical skills by completing a lesson in Imagine Math. I can ask questions and give my teacher feedback on my learning experience. DOL: Students will be able to show mastery of Grade 6 TEKS by achieving mastery on Unit 1 Pre - Test. Students will pass a prescribed Imagine Math lesson.	FOCUS: SEL/Excel Objective (Student Friendly): I can have fun in math class by participating in a Block Party Activity. I can pre-assess my mathematical skills by completing the IXL Math Diagnostic Assessment. I can PLAY & WIN a Dreambox game. I can update my tracker and organize my data folder. I can ask questions and give my teacher feedback on my learning experience. DOL: Block Party Reflection. Students will complete IXL Math Diagnostic Assessment and win a Dreambox game.
Team Time What Now: Create SMART Goals What's Next: Bring 1 question for CFA 7.3A.	Team Time What Now? Create CFA 7.3A What's Next? Put Assessment in Edugence	Team Time What Now? Review Data Protocols (Get Formative!) What's Next? Assign Unit 1 Pretest	Team Time What Now? Test Administration What's Next? Administer test and bring student work.	Team Time What Now? Identify a HML student in each class period. What's Next? Unit 1 Pre-Test Data Dig. Adjust Instruction
Activities: All About Me & School Wide Routines & Procedures	Activities: Classroom Protocols Promote Open Lines of Communication	Activities: COMPASS Activity (Personality Assessment) & Future You Activity	Activities: Administer Unit 1.1 Pre-Test & MD Social Contract Brainstorm	Activities: Block Party (Building Relevance) & Data Tracking
Aug 22 - 1.1 LE 1	23 - 1.1 LE 2 L1	24 - 1.1 LE 2 L2	25 - 1.1 LE 2 L3	26 - 1.1 LE 2 L4

TEK: 7.2 A Objectives (Student Friendly): I can describe relationships between different sets and subsets of rational numbers. I can use a visual representation, like a Venn diagram, to organize sets of numbers. DOL: Students will be able to use a Venn Diagram to organize sets of numbers and distinguish between different rational numbers in Canvas.	TEK: 7.3 A Objectives (Student Friendly): I can represent integer operations using concrete models. I can add and subtract integers using a number line. DOL: Student will be able to add and subtract integers, using concrete models with 80% accuracy.	TEK: 7.3 A Objectives (Student Friendly): I can represent integer operations using concrete models. I can add and subtract integers using a number line. DOL: Student will be able to add and subtract integers, earning a Smartscore of 80 when answering 16 out of 20 questions on IXL.	TEK: 7.3 A Objectives (Student Friendly): I can represent integer operations using concrete models. I can multiply and divide integers using a number line. DOL: Students will be able to multiply and divide integers using concrete models with 80% accuracy.	TEK: 7.3 A Objectives (Student Friendly): I can represent integer operations using concrete models. I can multiply and divide integers using a number line. DOL: Students will be able to multiply and divide integers, earning a Smartscore of 80 when answering 16 out of 20 questions on IXL.
Team Time What Now? Revisit Pre-Test/7.2A DOL What's Next?	Team Time What Now? Revisit CFA 7.3A What's Next? Revisit Facilitation of Social Contract	Team Time What Now? Create CFA 7.3B. Revisit Facilitation of Social Contract What's Next? Put Assessment in Edugence. Create a DOL for the upcoming week.	Team Time What Now? Counselor Discussion about 504 Plans. Review and Finalize DOLs for upcoming week. What's Next? Finalize Social Contract. Get student Signatures. Select HML Students based on Data.	Team Time What Now? Pretest Data Dig/Review of 7.2A DOL/Select HML Students What's Next?
Activities: Model & Teach Student Affirmations	Activities: Teach Teamwork/Leadership Roles for groups	Activities: Teach 3 Non-Verbal Signs	Activities: Social Contract in Action	Activities: Good Things in Action
Aug 29	30	31 - CFA 7.3A	Sep 1	2
TEKS: 7.3 A Objectives (Student Friendly): I can perform operations on decimals. I can apply decimal operations to solve real-world problems. DOL: Students will be able to add and subtract decimals earning a Smartscore of 80 when answering 16 out of 20 questions on IXL.	TEKS: 7.3 A Objectives (Student Friendly): I can perform operations on decimals. I can apply decimal operations to solve real-world problems. DOL: Students will be able to multiply and divide decimals, earning a Smartscore of 80 when answering 16 out of 20 questions on IXL.	TEKS: 7.3 A Objectives (Student Friendly): I can explain our social contract and organize my INB. I can show mastery of TEK 7.3A by achieving mastery on CFA. DOL: Students will answer at least 3 of 4 questions correctly on CFA 7.3A (Integers & Decimals) to show mastery of TEK.	TEKS: 7.3 A Objectives (Student Friendly): I can add and subtract fractions. I can apply fraction operations to solve real-world problems. DOL: Students will be able to add and subtract fractions earning a Smartscore of 80 when answering 16 out of 20 questions on IXL.	TEKS: 7.3 A Objectives (Student Friendly): I can multiply and divide fractions. I can apply fraction operations to solve real-world problems. DOL: Students will answer two (2) out of three (3) questions correctly to show mastery of TEK 7.3A (Decimals and Fractions) in Edugence.
Team Time What Now? Review and Adjust IPC. What's Next? Strategy Share	Team Time What Now? Strategy Share What's Next? Review and Adjust IPC.	Team Time What Now? Review and Adjust IPC. What's Next? CFA Administration.	Team Time What Now? CFA Administration. CC Planning. What's Next? Review your class CFA 7.3 A data in preparation for CFA 7.3A Data Dig. Create CCI Plan.	Team Time What Now? CFA 7.3A Data Dig. What's Next? Create CCI Intervention & Enrichment Plan
Sep 5	6	7	8	9
Holiday Labor Day	TEKS: 7.3 A Objectives (Student Friendly): I can add and subtract fractions. I can apply fraction operations to solve real-world problems. DOL: Students will be able to add and subtact fractions earning a Smartscore of 80 when answering 16 out of 20 questions on IXL.	TEKS: 7.3 A Objectives (Student Friendly): I can multiply and divide fractions. I can apply fraction operations to solve real-world problems. DOL: Students will answer two (2) out of three (3) questions correctly to show mastery of TEK 7.3A (Decimals and Fractions) in Edugence.	TEK: Objectives (Student Friendly): DOL: Students will	TEK: Objectives (Student Friendly): DOL: Students will
	Team Time What Now? Tag students in Es What's Next? Assign Students	S Program to groups.	Team Time What Now? Assign students to What's Next? Cub Connection	Student Orientation
Sep 12- MAP TESTING	13 - MAP Makeups	14	15	16 - 1.2/2.1 LE 2 L3

Objectives (Student Friendly): I can show what I have already mastered by completing the MAP Math BOY Assessment. DOL: Students will complete NWEA 6+ MAP Math BOY Assessment and score within 10 points of a 220.		TEKS: 7.3A Objectives (Student Friendly): I can multiply and divide fractions. I can apply fraction operations to solve real-world problems. DOL: Students will answer two (2) out of three (3) questions correctly to show mastery of TEK 7.3A (Decimals and Fractions) in Edugence		(Early Release) TEKS: 7.3B Objectives (Student Friendly): I can apply rational number operations to solve real-world problems. DOL: Students will answer two (2) out of three (3) questions correctly to show mastery of TEK 7.3B (Decimals and Fractions) in Edugence.
Team Time What Now? Update IPC What's Next? Cub Connection Reflection & Lesson Scaffolding	Team Time What Now? Cub Connection Reflection & Lesson Scaffolding What's Next? Cub Connection Reflection & Lesson Scaffolding	Team Time What Now? Cub Connection Reflection & Lesson Scaffolding What's Next? Revisit Unit 1 Assessment	Team Time What Now? Revisit Unit 1 Assessment and make instructional adjustments What's Next? Take Unit 2 Assessment & Unpack Unit 2.	Purposeful Planning Agenda: → Take Unit 2 Assessment. → Unpack Unit 2 → Update IPC for 2nd Six Weeks
Sep 19	20 - Unit 1 Review	21 - Unit 1 Assessment	22 - Makeups, Data & Unit 2 Pretest	23 - Intro to Unit 2
TEKS: 7.3B Objectives (Student Friendly): I can apply rational number operations to solve real-world problems. DOL: Students will answer two (2) out of three (3) questions correctly to show mastery of TEK 7.3B in Edugence.	TEKS: 7.2A, 7.3 A/B Objectives (Student Friendly): I can show mastery of Unit 1 TEKS by achieving mastery on review activities. I can apply rational number operations to solve real-world problems. I can select strategies and tools to problem solve given a situation. DOL: Unit 1 Review	TEKS: 7.2A, 7.3 A/B Objectives (Student Friendly): I can show mastery of TEKS 7.2A and 7.3A/B by achieving mastery on Unit 1 Assessment. I can reflect on my mastery of TEKS 7.2A and 7.3A/B by updating my Unit 1 data tracker. I can show what I already know about Unit 2 concepts by completing Unit 2 Pre-test. DOL: Unit 1 Assessment.	TEKS: 7.4B/D/E & 7.5A/C Objectives (Student Friendly): I can demonstrate my readiness to learn Unit 2 Concepts by completing the Unit 2 Pre-Test. I can update my tracker and organize my data folder. DOL: Students will be able to show mastery of Grade 6 TEKS by achieving mastery on Unit 2 Pre - Test.	TEKS: 7.4B/D/E & 7.5A/C Objectives (Student Friendly): I can have fun in math class by participating in a Block Party Activity. DOL: Unit relevance guide reflection. End of 1st Six Weeks
Team Time What Now? Revisit 2nd Six Weeks IPC What's Next? Create Smartgoals for Unit 2.	Team Time What Now? Create Smartgoals for Unit 2. What's Next? Create CFA	Team Time What Now? Create CFA What's Next? Create DOLs for next week's plans.	Team Time What Now? Create DOLs for next week's plans. What's Next? Review Unit 1 Results to Prepare for DD.	Team Time What Now? Unit 1 Data Dig What's Next? T-TESS

2022-2023

2nd Six Weeks Instructional Planning Calendar
Non-Negotiables: TEKS, Objective, DOL (Exit Ticket), Common Assessments, Flex Days

Second Grading Period September 26 - November 26 - Novembe				<u>mber 26 - November 4, 2022</u>		
<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>		
26	27	28	29	30		
TEK: 6.10 A Objectives (Student Friendly): I can use inverse operations to solve one-step equations.		TEKS: 7.4B Objectives (Student Friendly): I can use proportional reasoning to find unit rates.		TEKS: 7.4B/D Objectives (Student Friendly): I can solve real-world problems that involve ratios, rates, and proportions. DOL: Students will be able to		
DOL: Students will be able to 6.10A by correctly completing		by scoring at least a 63% in		show mastery of TEK 7.4D by scoring at least a 63% in Edugence.		
Team Time What Now? T-Tess What's Next? Create DOLs	Team Time What Now? Create DOL & put into Edugence/Student Scheduling with Ms. Silva What's Next? EB Training in Team Room	Team Time What Now? EB Training in Team Room What's Next? Strategy Share	Team Time What Now? Creating DOLs & put in Edugence. Planning Targeted Interrventions that will help us meet campus drafted goals. What's Next? Create intervention Groups for Wednesday-Thursday Rotations.	Team Time What Now? Create multiplication intervention Groups for Wednesday-Thursday Rotations What's Next? Data Dig with Student Work Samples from this week's DOLs (7.4B)		
Oct 3	4	5 - Early Release & Parent Conference Day	6 Fall Break	7 Fall Break		
TEK: 7.5A/C Objectives (Student Friend strategies to calculate unit rat can explain the attributes of strategies to calculate unit rat can explain the attributes of strategies to calculate unit rate can explain the attributes of strategies to calculate the strategies to calculate the strategies of strategies to calculate the strategies of strategies to calculate the strategies of strategies of strategies to calculate the strategies of strategies	tes in real-world problems. I similar shapes.	TEK: 7.5C Objectives (Student Friendly): I can find missing side lengths of similar shapes using scale factors and proportions. DOL: Students will be able to show mastery of TEK 7.5C by scoring at least a 63% in Edugence.	of scale as. e able EK ast a Fall Break		an find lengths of s using scale roportions. ts will be able ery of TEK ng at least a	
Team Time What Now? Data Dig with Student Work Samples from last week's DOLs (7.4B) What's Next? Create division intervention Groups for Wednesday-Thursday Rotations	Team Time What Now? Create division intervention Groups for Wednesday-Thursday Rotations What's Next? Parent Conferences	Parent Conference				

PSAT Resources

Oct 10	11	12 -	13	14
	TEKS: 7.5A/C Objectives (Student Friendly): I can solve problems involving scale drawings.	TEK: 7.4E Objectives (Student Friendly): I can use proportions and unit rates to convert between measurement systems.	TEK: 7.4D Objectives (Student Friendly): I can use number line strategies to solve percent problems.	TEK: 7.4D Objectives (Student Friendly): I can use a proportion to solve percent problems.
District Holiday	DOL: Students will be able to show mastery of TEKS 7.4A/C by correctly answering a STAAR aligned question.	DOL: Students will be able to show mastery of TEK 7.4E by correctly answering a STAAR aligned question.	DOL: Students will be able to show mastery of TEK 7.4D by correctly answering a STAAR aligned question.	DOL: Students will be able to show mastery of TEK 7.4D by correctly answering a STAAR aligned question.
	Team Time What Now? Revisit Phase 2 of Intervention Plan (Multiplication) What's Next? Put Unit 2 CFA in Edudgence	Team Time What Now? Put Unit 2 CFA in Edugencec What's Next? Complete Phase 2 INtevention Plan	Team Time What Now? Complete Phase 2 Intervention Plan (Division) using DOL 7.4B	What Now? Assign Cub Camp Intervention Assessment in Edugence What's Next?
Oct 17	18	19	20	21
TEK: 7.4D/7.13A Objectives (Student Friendly): I can distinguish between a sales tax rate and the sales tax. I can calculate sales tax for a given purchase.	TEK: 7.13A Objectives (Student Friendly): I can calculate income tax for earned wages. DOL: Students will be	TEK: 7.13F Objectives (Student Friendly): I can distinguish between discounts, coupons, and rebates. I can analyze and compare monetary incentives.	TEK: 7.4D Objectives (Student Friendly): I can solve real-world problems involving percents. I can solve problems involving percent increase and decrease.	TEK: 7.4D-E/7.13A/F Objectives (Student Friendly): I can show mastery of Unit 2 TEKS by scoring a 70% on G7 Unit 2 CFA in Edugence. DOL: Students will be able to
DOL: Students will be able to show mastery of TEK 7.13A by correctly answering a STAAR aligned question.	able to show mastery of TEK 7.13A by correctly answering a STAAR aligned question.	DOL: Students will be able to show mastery of TEK 7.13F by correctly answering a STAAR aligned question.	DOL: Students will be able to show mastery of TEK 7.4D by correctly answering a STAAR aligned question.	show mastery of TEK 7.4D-E/7.13A & F by scoring at least a 70% on Unit 2 CFA in Edugence.
Team Time What Now? Assign G7 Unit 2 CFA What's Next? Create DCA 1 Review	Team Time What Now? Create DCA 1 Review What's Next? Update CCI Plan	Team Time What Now? Update CCI Plan What's Next? G7 Unit 2 CFA Data Dig		
DCA Window 10/17 - 10/2	Activities: 8th Period Assembly			
Oct 24 - DCA 1 Review	25 - DCA 1 Review	26 - DCA 1	27 - DCA 1 Make-Ups & Data Day	28 - I/E
TEKS: 7.2A, 7.3 A/B, 7.4A-E, 7.5A/C, 7.13A/F Objectives (Student Friendly): I can show mastery of Units 1 - 2 TEKS by achieving mastery on review activities. DOL: Students will be able to complete DCA 1 Review Packet with 80% accuracy.		TEKS: 7.2A, 7.3 A/B, 7.4A-E, 7.5A/C, 7.13A/F Objectives (Student Friendly): I can show mastery of TEKS 7.2A, 7.3 A/B, 7.4B/D/E, 7.5A/C, 7.13A/F by achieving mastery on DCA 1. DOL: Students will be able to show mastery of Units 1 and 2 TEKS by scoring at least a 63% on DCA 1 in Edugence.	TEKS: 7.4B/D/E, 7.5A/C, 7.13A/F Objectives (Student Friendly): I can reflect on my mastery of TEKS 7.2A, 7.3 A/B, 7.4B/D/E, 7.5A/C, and 7.13A/F by updating my Unit 2 data tracker. DOL: Students will be able to update data trackers to show mastery of Units 1 and 2 TEKS.	(Early Release) TEKS: 7.4A-C Objectives (Student Friendly): I can demonstrate my readiness to learn Unit 3 Concepts by completing the Unit 3 Pretest. I can update my tracker and organize my data folder. DOL: Students will be able to show mastery of Grade 6 TEKS by achieving mastery on Unit 3 Pre-Test.
Team Time What Now? Assign DCA 1 in Edugence What's Next? G7 Unit 2 CFA Data Dig	Team Time What Now? G7 Unit 2 CFA Data Dig What's Next? DCA Prep	Team Time What Now? DCA Prep What's Next? Academic Conversations	Team Time What Now? Academic Conversations in Room 168. What's Next? DCA 1 Data Talk Prep, Take Unit 3 Assessment, Unpack Unit 3	Team Time: DCA 1 Action Plan Purposeful Planning Agenda: → Take Unit 3 Assessment → Unpack Unit 3
Activities: Phase 2 Division Intervention			Activity: Unit 3 Pretest	
Oct 31	Nov 1 -	2 -	3 -	4 -
Unit 3				

TEKS: 7.4A/B/C TEKS: 7.4C Objectives (Student **TEKS: 7.4C Objectives** (Student **TEKS: 7.4A/C** Friendly): I can represent Objectives (Student Friendly): I can describe Objectives (Student constant rates of change Friendly): I can plot and the constant of **TEKS: 7.4A** Friendly): I can distinguish in mathematical and identify the coordinates of proportionality as the ratio **Objectives (Student Friendly):** between proportional and real-world problems. an ordered pair (x,y). of y to x. non-proportional situations I can represent constant rates of I can graph a proportional I can describe the constant I can determine the using tables, using graphs change using multiple relationship and interpret of proportionality as the constant of proportionality and equations in the form y = representations. the unit rate as the rate of ratio of y to x. in a verbal description, kx or y = mx + b, where $b \neq$ change or constant of table, graph or equation. DOL: Students will be able to proportionality of the line. DOL: Students will be able I can determine the show mastery of TEKS 7.4AC by to show mastery of the constant of proportionality DOL: Students will be able answering 4 of 6 STAAR aligned DOL: Students will be coordinate plane and the in real world problems. to show mastery of the questions correctly on Unit 3 able to show mastery of explain what the term CFA 1 in Edugence. learning objective by TEK 7.4A by answer 3 of 4 Constant of Proportionality DOL: Students will be correctly analyzing 3 of 4 is with 63% accuracy on STAAR questions correctly able to show mastery of offers correctly in Canvas. in Edugence. TEK 7.4C by answer 3 of Exit Ticket. 4 STAAR questions correctly in Edugence. **Team Time Team Time Team Time Team Time** End of 2nd Six Weeks What Now? DCA Action What Now? DCA 1 Data What Now? Unit 3 Smart What Now? DDI Unit 3 **Team Time** What Now? DDI DOLs 7.4C & Meeting Pretest What's Next? DCA 1 Data What's Next? Unit 3 What's Next? DDI Unit 3 What's Next? DDI DOLs

Step 3: Unit SMART Goals

Smart Goals

SMART Goals

7.4C & 7.4A

What's Next? Update Unit 3 IPC

School: Bowie Middle School Team Name: 7th Grade Math

Pretest

Team Leader: Allmon

Meeting

Team Members: Allmon, Marquez, Folse, Davis, Scruggs

District/Campus Goal:

Goal 3: Bowie will increase the percentage of Grade 6-8 students who meet or exceed projected growth on MAP Growth Mathematics from 47% to 65% by May 2022 and will increase the percentage of EL students who meet or exceed projected growth on MAP Growth Mathematics from 42.6% to 65% by May 2022.

Goal 4: Bowie MS will increase the percentage of 6-8 grade students scoring at MEETS or above on STAAR Math and Algebra 1 from 15.4% to 50% by May 2023, and Bowie MS will increase the percentage of EL students scoring at MEETS or above on STAAR Math and Algebra 1 from 6.5% to 20% by May 2023.

Grade 6 STAAR 2022 Data:

- 6.3 D Add, subtract, multiply, divide integers (43%)
- 6.3 E Multiply and divide positive rational numbers (51%)
- 6.4 B Apply qualitative and quantitative reasoning to solve prediction and comparison of real-world problems involving ratios and rates (42%)
- 6.5 B solve real-world problems to find the whole given a part and the percent, to find the part given the whole and the percent, and to find the percent given the part and the whole, including the use of concrete and pictorial models (46%)

6.10 A (32%) -

- 6.6C (17%) represent a given situation using verbal descriptions, tables, graphs, and equations in the form y = kx or y = x + b.
- 6.8D (24%) Area of Rectangles, Parallelograms, Triangles, Trapezoids and Volume

of Rectangular prisms.

Grade 7 STAAR 2022 Data:

- **7.3A** Add, subtract, multiply, divide integers (18%)
- **7.3B** Apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers (54%)
- **7.4B** calculate unit rates from rates in mathematical and real-world problems (31%)
- **7.4D** solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems (42%)
- **7.5C** solve mathematical and real-world problems involving similar shape and scale drawings (17%)
- **7.4A** (44%)
- **7.7A** (51%)
- **7.11A** (33%)
- 7.9A (46%)
- **7.9B** (38%)
- 7.9C (37%)
- **7.9D** (48%)
- **7.6I** (27%)
- **7.6H** (66%)
- **7.6G** (51%)

Team SMART Goal	Strategies and Action Steps	Who is Responsible	Target Date or Timeline	Evidence of Effectiveness
Seventh grade math will increase the percentage of 7th grade students who meet proficiency on TEK 7.3A from 43% to 63% by 9/8.	 Direct teach Small group Fluency building for computation 	All teammates	September 8, 2022 September 21, 2022	 CFA 7.3A CFA 7.3B Unit 1
Seventh grade math will increase the percentage of 7th grade students who meet proficiency on TEK 7.3B from 43% to 63% by 9/21.				
20101111191010	Direct teachFluency building for		October 4, 2022	CFA 7.4BInformal

the percentage of 7th grade students who meet proficiency on TEK 7.4B from 42% to 63% by 9/29.	division ○ Tic tac toe (Multiples)			formative assessments
Seventh grade math will increase the percentage of 7th grade students who meet proficiency on TEK 7.4D from 46% to 63% by 10/24.	 Direct teach Small group Solve the proportion using: Unit Rates Equivalent Ratios WON Chart/Butterfly method Percent Increase/Decrease using formula How to reference materials 		October 24, 2022	 CFA 7.4D DCA 1 Assessment Informal formative assessments
Seventh grade math students will meet 63% proficiency on TEK 7.5C by 10/27 .	 Scale Drawings using patty paper Knowledge of transformations Direct teach Small group Similar figure statements posted in room 		October 27, 2022	 CFA 7.5C DCA 1 Assessment Informal formative assessments
Seventh grade math students will meet 63% proficiency on TEK 7.4A by 11/4 .	 Identify the ordered pair (x , y) Identify independent and dependent variables Divide y/x 	All teammates	November 4, 2022 November 11, 2022	 DOL 7.4A CFA 7.4AC DOL 7.7A. Informal formative assessments during class
Seventh grade math students will meet 63% proficiency on TEK 7.7A by 11/11.	 Slope from a graph using rise/run: Rise = up +, down - Run = right +, left - Slope from a table using change in y/change in x: Using addition or subtraction between x values and y values 			

	 Slope from a description/equation using words that represent "mx": Per ex. 5 per week (5x) Each ex. 6 each (6x) Every ex. Loses \$7 a month (-7x) Monthly ex. \$20 monthly (20x) 			
Seventh grade math students will meet 63% proficiency on TEK 7.11A by 12/21 .		All teammates	December 21, 2022	 CFA 7.11A (Equations) CFA 7.11A (Inequalities) DCA 2 Assessment Informal formative assessments during class
Seventh grade math students will meet 63% proficiency on TEK 7.9C by 02/13.	Students should know formulas for Area (A) of: • Rectangles, Squares, parallelograms: • A = Iw or A=bh • Trapezoids: A = ½ (b1 + b2)h • Triangles: A = ½ bh Formulas for Area of: • Semi-Circles - A = • $\frac{\pi r^2}{2}$ • Quarter-Circles - A = $\frac{\pi r^2}{4}$	All Teammates	February 13, 2022	 DOL 7.9B CFA 7.9B DOL 7.9C CFA 7.9C DCA 2 Assessment Informal formative assessments during class
Seventh grade math students will meet 63% proficiency on TEK 7.6I by 3/10.	Students should know • How to set up proportional relationships to	All teammates	March 10, 2023	 DOL 7.6I CFA 7.6I Informal formative assessments during class

	make predictions. Difference between independent and dependent compound events. Collected data is used for experimental probabilities. Sample spaces are used for theoretical probabilities.			
Seventh grade math students will meet 63% proficiency on TEK 7.6H by 3/24.	Students should know: How to Multiply fractions How to Simplify fractions A coin has 2 sides (Heads and Tails) A die has 6 sides labeled 1 - 6. There are 52 cards in a deck containing 4 suits (Hearts, Clubs, Spades, Diamonds) that each have 13 cards. Marbles are made of a variety of colors. Simulations can be done by hand and with technology.	All teammates	March 24, 2023	 DOL 7.6H CFA 7.6H Informal formative assessments during class

	 A variety of objects can be used. 			
Seventh grade math students will meet 63% proficiency on TEK 7.6G by 3/30 .	 Students should know How to recognize proportional relationships within data. How to represent information with different forms of rational numbers. Random Samples represent a population. All samples do not represent populations, samples can be biased. 	All teammates	March 30, 2023	 DOL 7.6G CFA 7.6G Informal formative assessments during class