Word Problems?
No Problem!

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Say hello.

What makes word problems so difficult for students?

Word Problems? No Problem!

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Maya has 120 caramel apples to sell. Each caramel apple is covered with one topping.

- $\frac{1}{5}$ of the caramel apples are covered with peanuts.
- $\frac{1}{3}$ are covered with chocolate chips.
- $\frac{3}{10}$ are covered with coconut.
- The rest are covered with sprinkles.

How many caramel apples are covered with sprinkles?

A 100

B 33

C 25

D 20

Solve the problem

What skills are necessary to solve this problem?

Maya has 120 caramel apples to sell. Each caramel apple is covered with one topping.

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A 100

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C 25

D 20

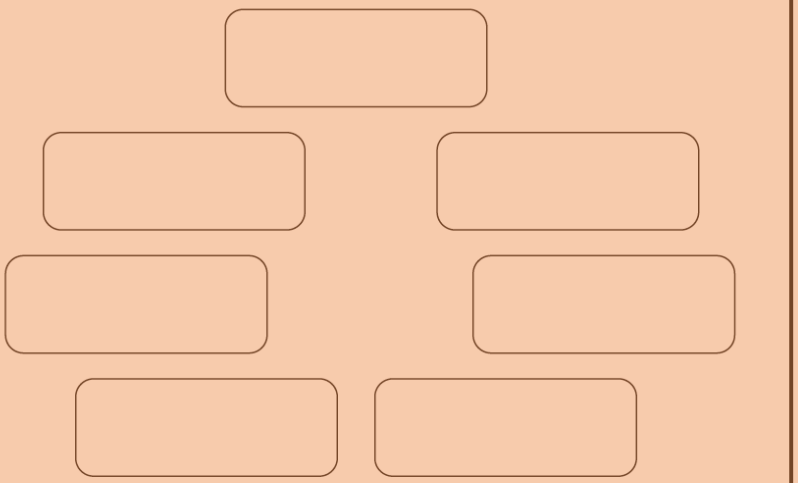
Solve the problem.

What skills are necessary to solve this problem?

Word Problems

WORD PROBLEMS

Research and Information



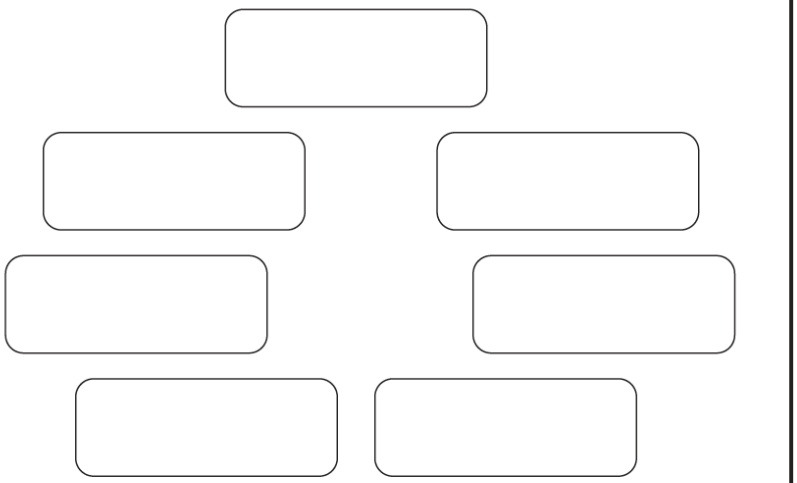
Key words tied to operations is an ineffective word-problem strategy.
(Karp et al., 2019; Powell et al., 2022)

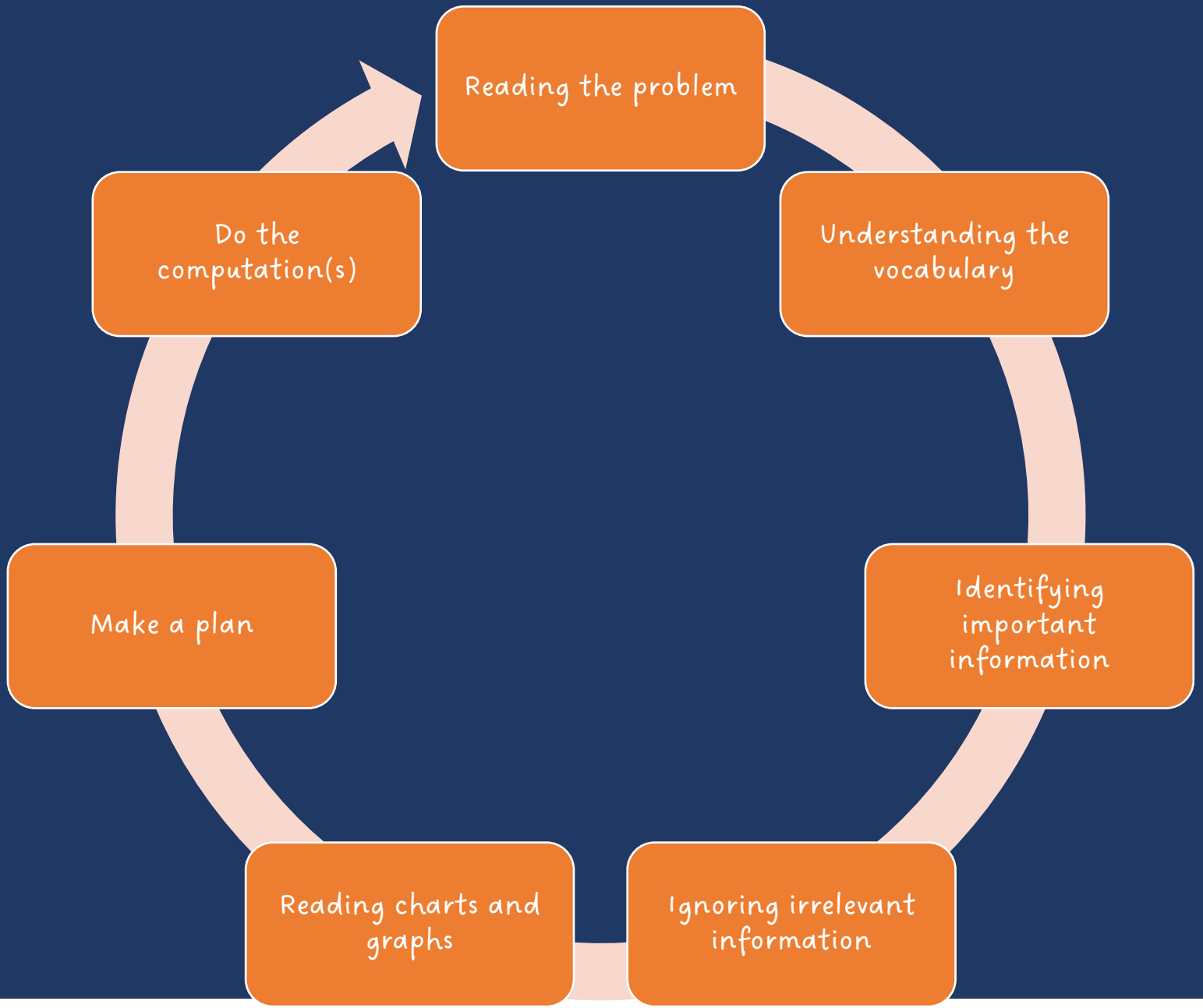
Using a meta-cognitive strategy improves word-problem performance.
(Freeman-Green et al., 2015; Krawec et al., 2012; Montague et al., 2011; Swanson et al., 2014)

A focus on schemas improves word-problem performance.
(Alghamdi et al., 2020; Cook et al., 2020; Flores et al., 2016; Fuchs et al., 2021; Griffin et al., 2019; Jitendra et al., 2013; Lein et al., 2020; Peltier et al., 2020; Powell et al., 2022; Xin & Xhang, 2009; Zheng et al., 2013)

WORD PROBLEMS

Research and Information



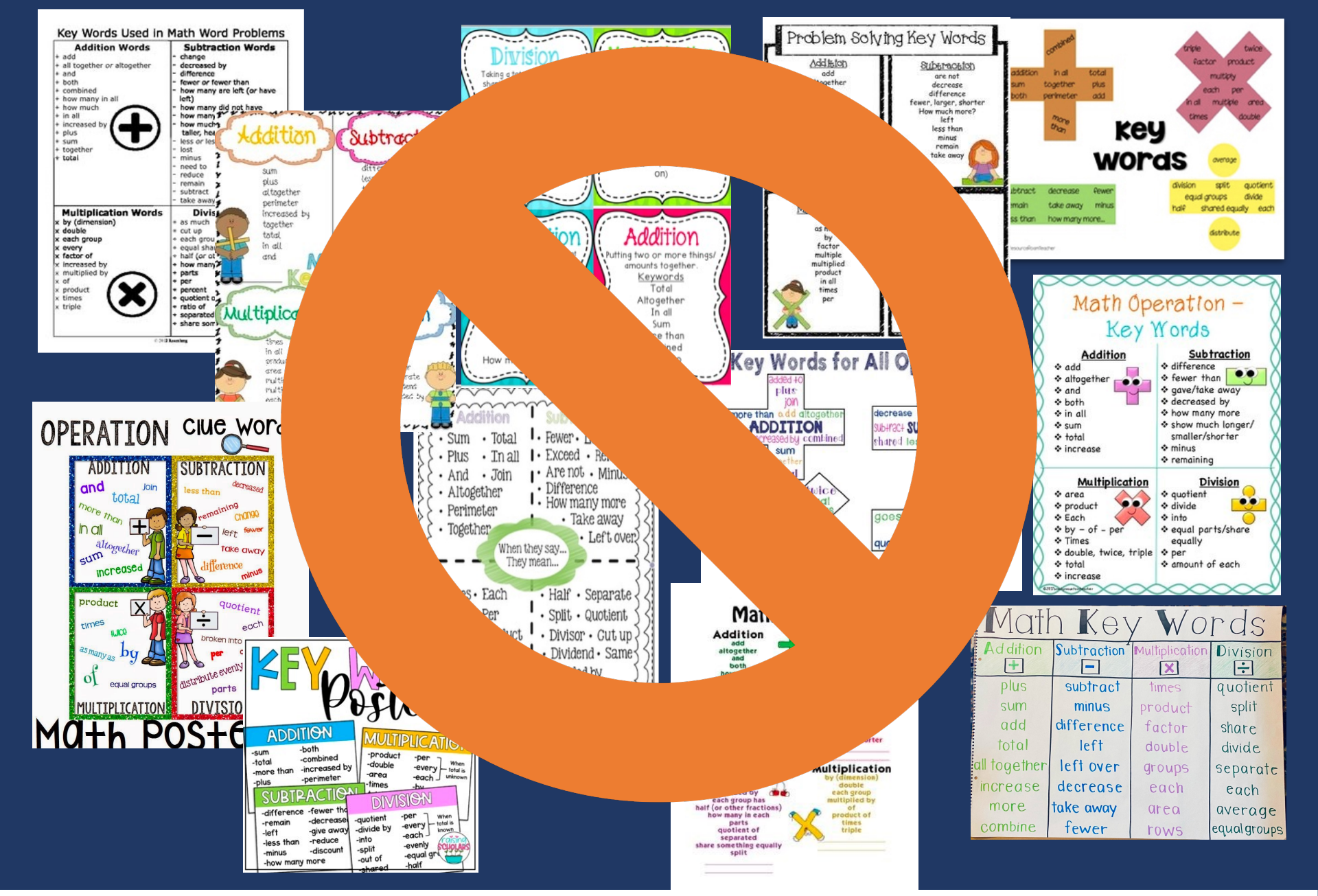


Ineffective Strategies

1. Keywords tied to operations

Carmelita had 8 pencils **fewer** than Jenny. If Jenny had 18 pencils, how many pencils did Carmelita have?

Carmelita had 8 pencils **fewer** than Jenny. If Carmelita had 18 pencils, how many pencils did Jenny have?



Description of Single-Step Word Problems (n = 132)

Schema	Occurrence of schema		Any keyword		Schema-specific keywords[a]		Multiple keywords[a]		Keyword(s) led to correct solution[a]	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%
Total	27	20.5	26	96.3	23	88.5	5	19.2	21	80.8
Difference	17	12.9	17	100.0	14	82.4	2	11.8	12	70.6
Change	11	8.3	7	63.6	5	71.4	5	71.4	2	28.6
Equal groups	29	22.0	26	89.7	22	84.6	18	69.2	8	30.8
Comparison	10	7.6	9	90.0	9	100.0	4	44.4	5	55.6
Ratios or proportions	29	22.0	23	79.3	9	39.1	9	39.1	6	26.1
Product of measures	9	6.8	9	100.0	8	88.9	1	11.1	5	55.6

[a]When a problem featured a keyword.

Description of Multi-Step Word Problems (n = 84)

Schema	Occurrence of schema[a] *n*	Occurrence of schema[a] %	Any keyword *n*	Any keyword %	Keyword(s) led to correct solution[b] *n*	Keyword(s) led to correct solution[b] %
Total	40	47.6	39	97.5	3	7.7
Difference	11	13.1	11	100.0	1	9.1
Change	21	23.8	19	95.0	1	5.3
Equal groups	49	58.3	48	98.0	1	2.1
Comparison	7	8.3	7	100.0	0	0.0
Ratios or proportions	22	25.0	16	76.2	1	6.3
Product of measures	7	8.3	7	100.0	2	28.6

[a]Sum across schemas does not equal 100 because each word problem featured more than one schema.

[b]When a problem featured a keyword.

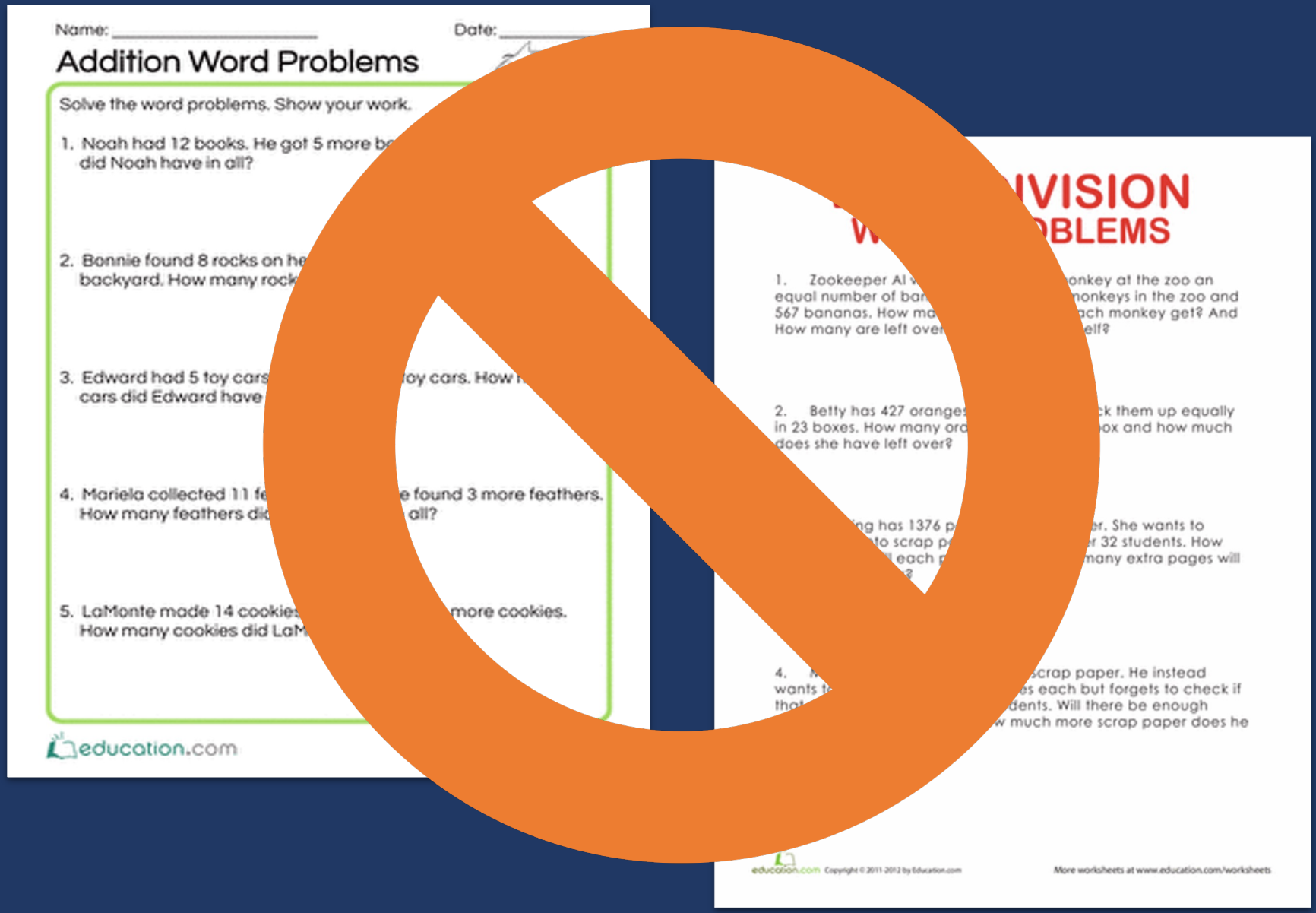
Keywords are important to identify and understand

Keywords are the mathematical vocabulary that help an students understand what the story is about and what they need to do

Talk about keywords ("What does *more than* tell you about?")

But, *do not* tie a keyword to a specific operation!

2. Presenting problems by operation



Effective Strategies

Teach an attack strategy

Teach about schemas

WORD PROBLEMS

Attack Strategies

SOLVE

- Study the problem
- Organize the information
- Line up a plan
- Verify the plan
- Examine the answer

R-CUBES

- Read the problem
- Circle key numbers
- Underline the question
- Box action words
- Evaluate steps
- Solve and check

UPS Check

- Understand
- Plan
- Solve
- Check

RIDE

Read the problem.

Identify the relevant information.

Determine the operation and unit for the answer.

Enter the correct numbers and calculate, then check the answer.

RICE

Read and record the problem.
Illustrate your thinking.
Compute.
Explain your thinking.

RIDGES

Read the problem.
I know statement.
Draw a picture.
Goal statement.
Equation development.
Solve the equation.

SUPER

Slowly read the story problem twice.
Underline the question and circle the numbers you need.
Picture it. Draw the scenario to show what is happening.
Explain the problem with a number sentence.
Rewrite the answer in a sentence.

STAR

Stop and read the problem carefully.
Think about your plan and the strategy you will use.
Act. Follow your plan and solve
the problem.
Review your answer.

SHINES

Slowly and carefully read the problem.
Highlight or underline key information.
Identify the question by drawing a circle around it.
Now solve the problem. Show your work.
Examine your work for precision, accuracy, and clarity.
Share your answer by writing a sentence.

SOLVE

Study the problem.

Organize the facts.

Line up the plan.

Verify the plan with computation.

Examine the answer.

R-CUBES

Read the problem.
Circle key numbers.
Underline the question.
Box action words.
Evaluate steps.
Solve and check.

UPS✓

UNDERSTAND
Read and explain.

PLAN
How will you solve the problem?

SOLVE
Set up and do the math!

✓CHECK
Does your answer make sense?

Created by: Sarah Powell (srpowell@austin.utexas.edu)

Share your favorite attack strategy.

Teach an attack strategy

Teach about schemas

Total

Difference

Change

Equal Groups

Comparison

Ratios/Proportions

Additive Word Problems

Meanings of Addition
Meanings of Subtraction

Total

Addition

Count one set, count another set, put sets together, count sum

$$2 + 3 = 5$$

Change

Addition

Start with a set, add the other set, count sum

2 + 3 = 5

Total

Parts put together into a **total**

Annette spotted **4** cardinals and **5** blue jays. How many birds did Annette see?

Change

An amount that **increases** or decreases

Joan had $4. Then they earned $5 for cleaning their room. How much money does Joan have now?

3 + 9 = __

If you are from Illinois:

What's a Total story to show addition?

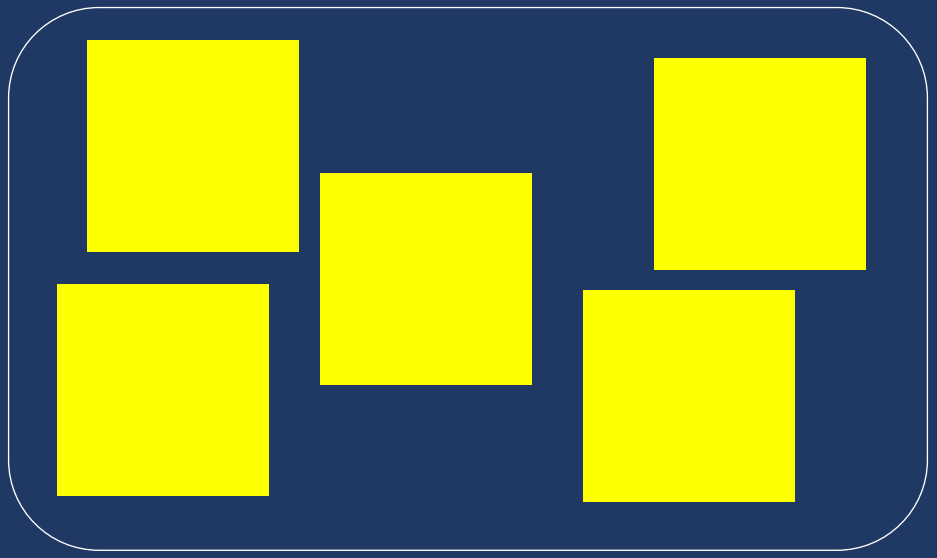
If you are from elsewhere:

What's a Change/Join story to show addition?

Change

Subtraction

Start with a set, take away from that set, count difference

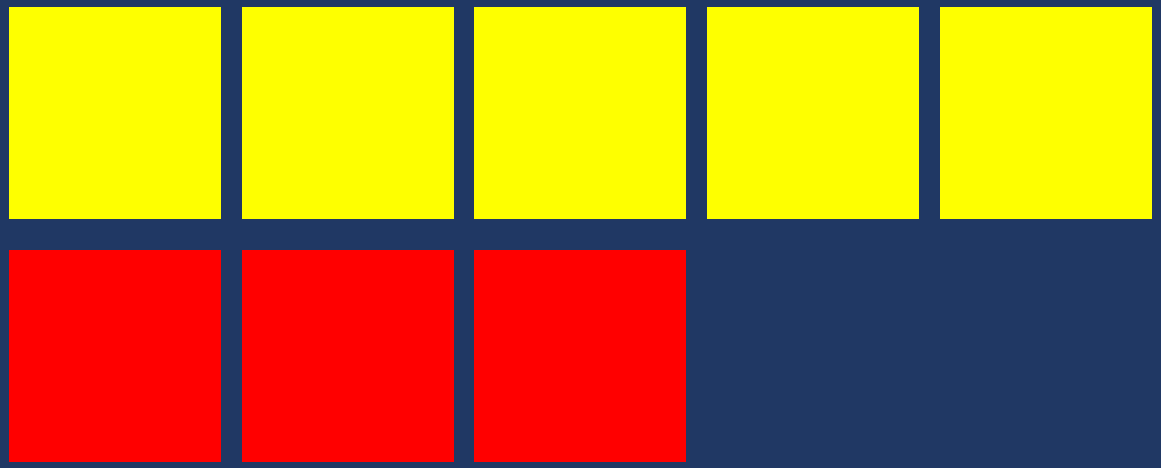


$5 - 3 = 2$

Difference

Subtraction

Compare two sets, count difference



$5 - 3 = 2$

Change

An amount that increases or **decreases**

Joshuan had 9 cookies. Then they ate 2 of the cookies. How many cookies does Joshuan have now?

Difference

Greater and lesser amounts compared for a difference

Sisa hiked 9 miles. Taylor hiked 2 miles. How many more miles did Sisa hike? (How many fewer did Taylor hike?)

9 - 5 = __

If you prefer winter:

What's a Change/Separate story to show subtraction?

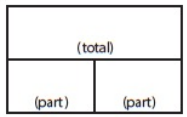
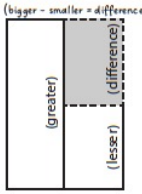
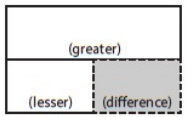
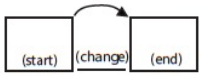
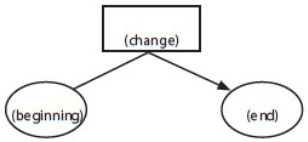
If you prefer summer:

What's a Difference story to show subtraction?

Total

Difference

Change

Schema and Definition	Equations and Graphic Organizers	Examples			Variations
Total (Combine; Part-part-whole) Parts combined for a sum	P1 + P2 = T (part + part = total)  	Sum unknown: Lyle has 11 red apples and 18 green apples. How many apples does Lyle have altogether?	Part unknown: Lyle has 29 red and green apples. If 11 of the apples are red, how many green apples does Lyle have?		More than two parts: Lyle has 34 apples. Of the apples, 11 are red, 18 are green, and the rest are yellow. How many yellow apples does Lyle have?
Difference (Compare) Sets compared for a difference	B − s = D (bigger − smaller = difference)  G − L = D (greater − less = difference)  	Difference unknown: Sasha wrote 85 words in her essay, and Tabitha wrote 110 words. How many fewer words did Sasha write than Tabitha?	Bigger/greater unknown: Tabitha wrote 25 more words than Sasha. If Sasha wrote 85 words, how many words did Tabitha write?	Smaller/lesser unknown: Tabitha wrote 110 words in her essay. Sasha wrote 25 words fewer than Tabitha. How many words did Sasha write?	(None)
Change (Join; Separate) An amount that increases or decreases	ST +/− C = E (start +/− change = end)   	End (increase) unknown: Jorge had $52. Then, he earned $16 babysitting. How much money does Jorge have now? End (decrease) unknown: Jorge had $52. Then, he spent $29 at the ballpark. How much money does Jorge have now?	Change (increase) unknown: Jorge had $52. Then, he earned some money babysitting. Now, Jorge has $68. How much did Jorge earn babysitting? Change (decrease) unknown: Jorge had $52 but spent some money when he went to the ballpark. Now, Jorge has $23. How much did Jorge spend at the ballpark?	Start (increase) unknown: Jorge has some money, and then he earned $16 for babysitting. Now, Jorge has $68. How much money did he have to start with? Start (decrease) unknown: Jorge had some money. Then, he spent $29 at the ballpark and has $23 left. How much money did Jorge have before going to the ballpark?	Multiple changes: Jorge had $78. He stopped and bought a pair of shoes for $42 and then he spent $12 at the grocery. How much money does Jorge have now?

Powell & Fuchs (2018).
Material collected from: Griffin & Jitendra, 2009; Fuchs et al., 2014; Fuchs, Seethaler, et al., 2008; Fuchs et al., 2010; Jitendra, 2002; Kintsch & Greeno, 1985; Van de Walle, Karp, & Bay-Williams, 2013.

Total

Additive Word Problems

A. Ali delivered 12 boxes of cookies on Friday and 25 boxes of cookies on Saturday. How many boxes of cookies did Ali deliver?	B. In March and April, it rained a total of 11.4 inches. If it rained 3.9 inches in March, how many inches did it rain in April?
C. Sam mows lawns and made $560 last week. She made $95 on Monday, $135 on Tuesday, and $70 on Wednesday. How much did Sam make on Thursday and Friday?	NOTES ABOUT TOTAL PROBLEMS:

Total

Part-part-whole
Combine

Parts put together into a **total**

Mandy saw 3 canoes and 8 kayaks. How many boats did Mandy see?

Total

Mandy saw 11 boats. If 3 of the boats were canoes, how many were kayaks?

Part

Mandy saw 11 boats. 8 of the boats were kayaks, how many were canoes?

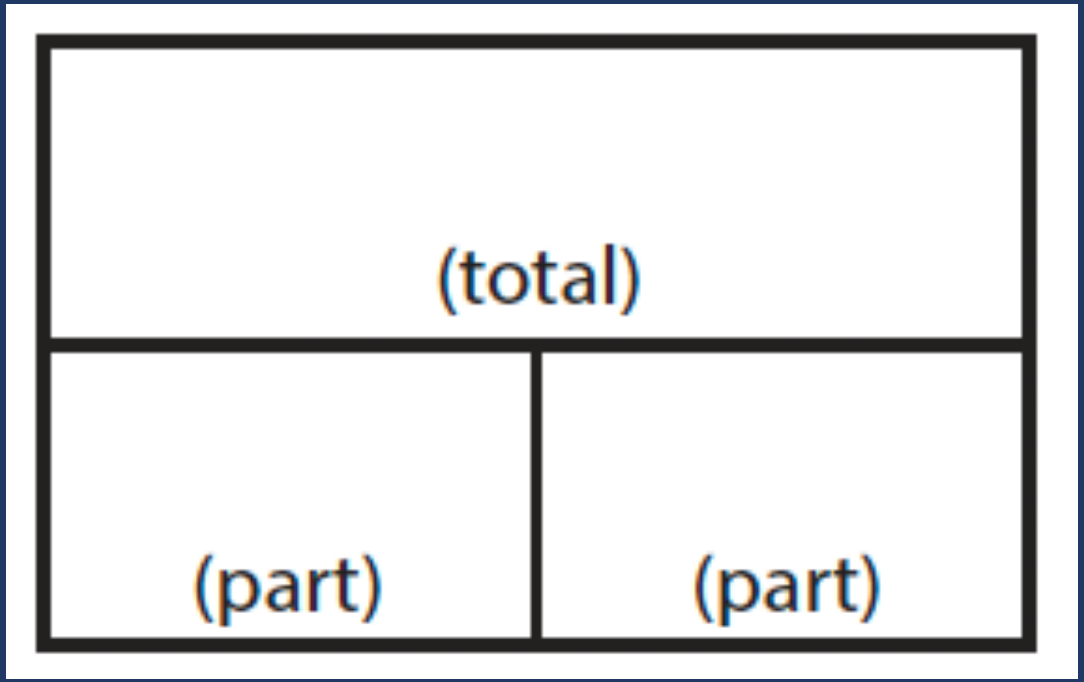
Part

Total

"Are parts put together for a total?"

Total

P1 + P2 = T



Fuchs et al. (2008); Griffin & Jitendra (2009)

Total

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Total

Share a Total problem.

Difference

Additive Word Problems

D. Audrey has 162 wooden beads and 95 glass beads. What is the difference between Audrey's wooden beads and glass beads?	E. Damian's dog eats 9 1/2 cups of dog food each week. Monte's dog eats 4 1/4 cups less each week than Damian's dog. How much does Monte's dog eat in a week?
F. The temperature in Norfolk was 12 degrees warmer than in Roanoke where the temperature was 79 degrees. It was 86 degrees in Marion. What was the temperature in Norfolk?	NOTES ABOUT DIFFERENCE PROBLEMS:

Difference

Compare

Greater and **lesser** amounts compared for a **difference**

L'Tanya has 10 pencils. Vickie has 4 pencils. How many more pencils does L'Tanya have?

L'Tanya has 6 more pencils than Vickie. If Vickie has 4 pencils, how many does L'Tanya have?

Vickie has 6 fewer pencils than L'Tanya. L'Tanya has 10 pencils. How many pencils does Vickie have?

Difference

Greater amount

Lesser amount

Total

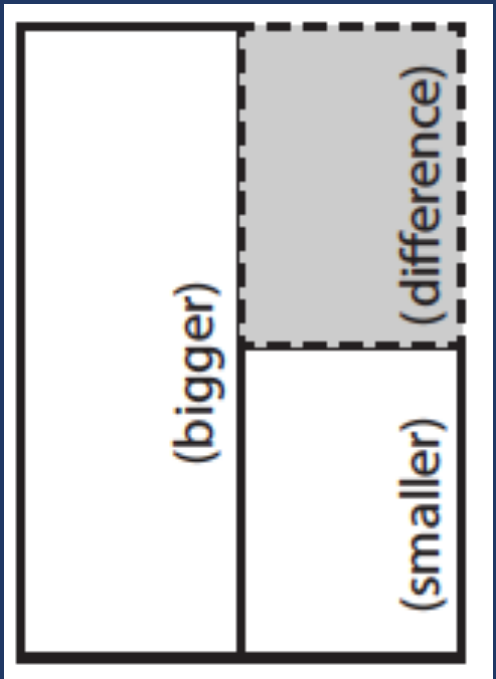
"Are parts put together for a total?"

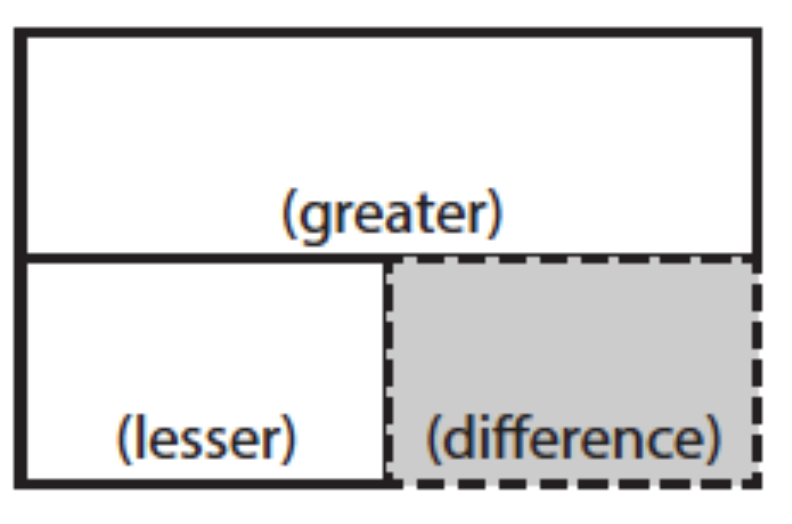
Difference

"Are amounts compared for a difference?"

Difference

G − L = D





Fuchs et al. (2008); Griffin & Jitendra (2009)

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Difference

Share a Difference problem.

Change

Additive Word Problems

G. A plant was 3 3/4 inches tall at the beginning of June. By the end of July, the plant was 9 1/8 inches tall. How many inches did the plant grow in 2 months?	H. Martina has some money in her bank account. Then, she spent $135.69 and has a balance of -$24.80. How much money did Martina have to begin with?
I. Hui saved $70 in January. In February, she spent $64 of the money she saved. She saved $92 more in March. How much has Hui saved by the end of March?	NOTES ABOUT CHANGE PROBLEMS:

Change

Join

An amount that **increases** or decreases

Annette had 6 notebooks. Then, she bought 3 notebooks. How many notebooks does Annette have now?

End amount

Annette had 6 notebooks. Then, she bought a few more notebooks. Now, Annette has 9 notebooks. How many notebooks did she buy?

Change amount

Annette had some notebooks. Then, she bought 3 notebooks. Now, Annette has 9 notebooks. How many notebooks did she have to start with?

Start amount

Change

Separate

An amount that increases or **decreases**

Jenny baked 20 cookies. Then, she ate 3 of the cookies. How many cookies does Jenny have now?

End amount

Jenny baked 20 cookies. Then, she ate some of the cookies. Now, she has 17 cookies. How many cookies did Jenny eat?

Change amount

Jenny baked some cookies. She ate 3 of the cookies and has 17 cookies left. How many cookies did Jenny bake?

Start amount

Total

"Are parts put together for a total?"

Difference

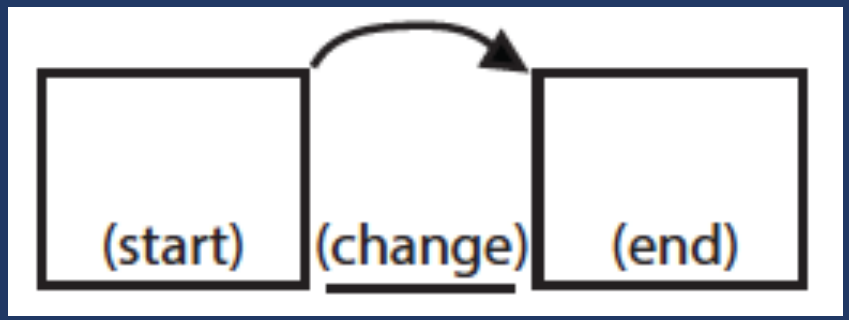
"Are amounts compared for a difference?"

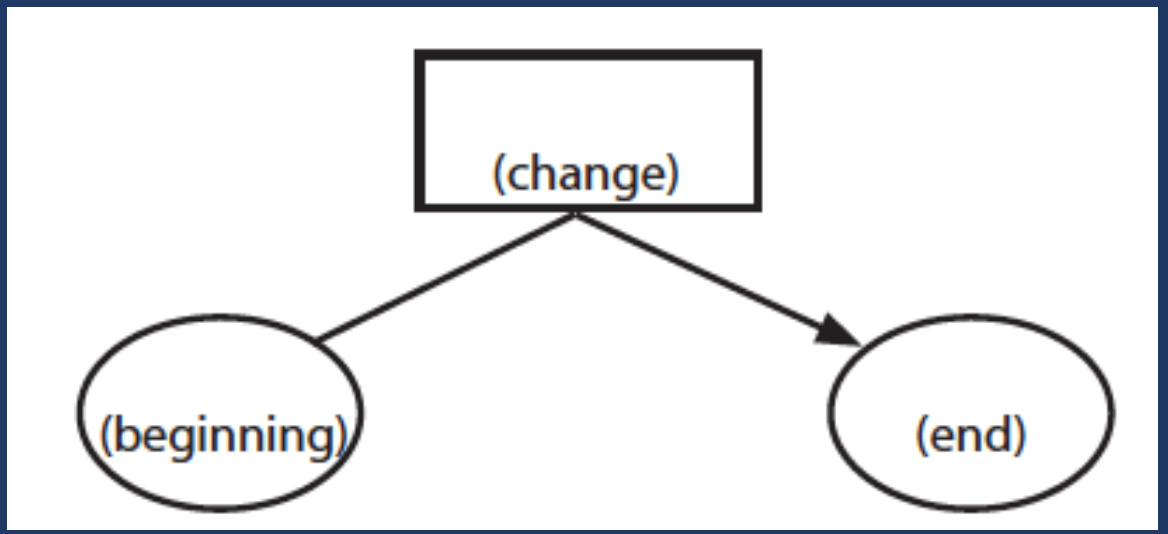
Change

"Does an amount increase or decrease?"

Change

ST +/− C = E





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Change

Share a Change problem.

Schema Check!

Change

Pablo goes to a stamp show where he can share, buy, and sell stamps.

26. Part A

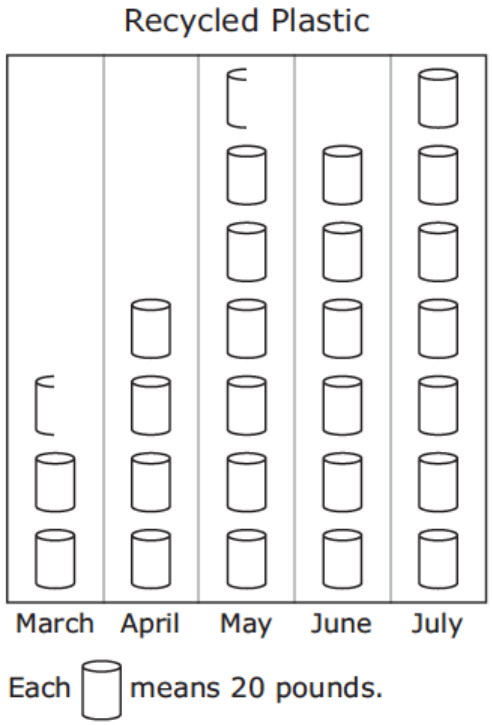
The first day, Pablo starts with 744 stamps. He buys 27 stamps from his friend. He then sells 139 stamps.

What is the total number of stamps that Pablo has after the first day of the stamp show?

Grade 3 PARCC

Difference

The graph below shows the number of pounds of plastic the Keller family recycled for five months.



Based on the graph, how many more pounds of plastic did the family recycle in July than in April?

Grade 3 STAAR

Total

Mr. Conley delivers packages. The bar graph shows the total number of packages he delivered on five days last week.

10. Part A

What is the total number of packages Mr. Conley delivered on Monday and Tuesday?

Ⓐ 300

Ⓑ 340

Ⓒ 350

Ⓓ 360

Grade 3 PARCC

Total

Difference

Change

Equal Groups

Comparison

Ratios/Proportions

Multiplicative Word Problems

Meanings of Multiplication
Meanings of Division

Equal Groups

Multiplication

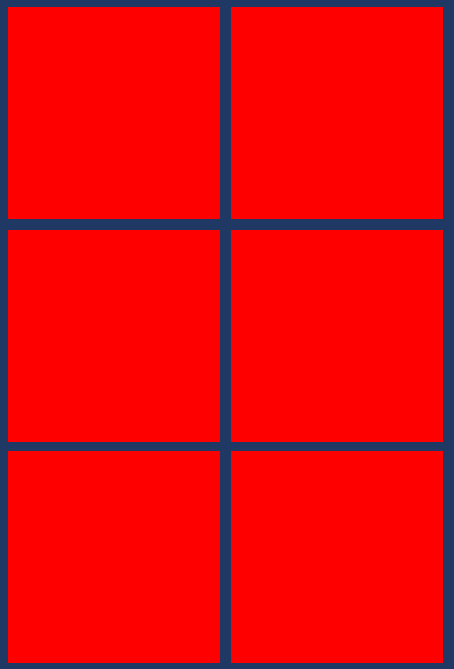
Show the groups, show the amount for each group, count product

$$3 \times 2 = 6$$

Equal Groups

Multiplication

Show the groups, show the amount for each group, count product

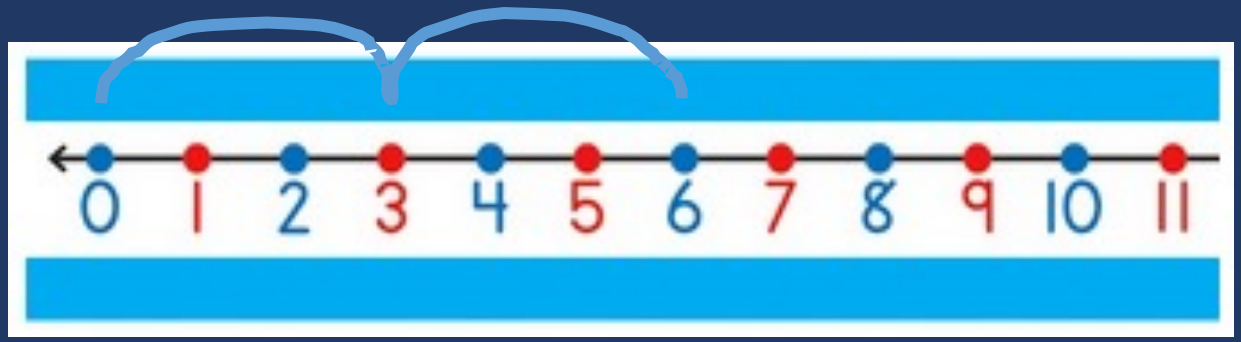


$3 \times 2 = 6$

Comparison

Multiplication

Show a set, then multiply the set



$$3 \times 2 = 6$$

Equal Groups

Groups multiplied by number in each group for a product

Callie has 2 boxes of crayons. There are 12 crayons in each box. How many crayons does Callie have altogether?

Comparison

Set multiplied by a number of times for a product

Carmen had 12 stickers. Phoenix had 2 times as many stickers as Carmen. How many stickers did Phoenix have?

$2 \times 5 = \_\_$

If you wear glasses:

What's an Equal Groups story to show multiplication?

If you don't wear glasses:

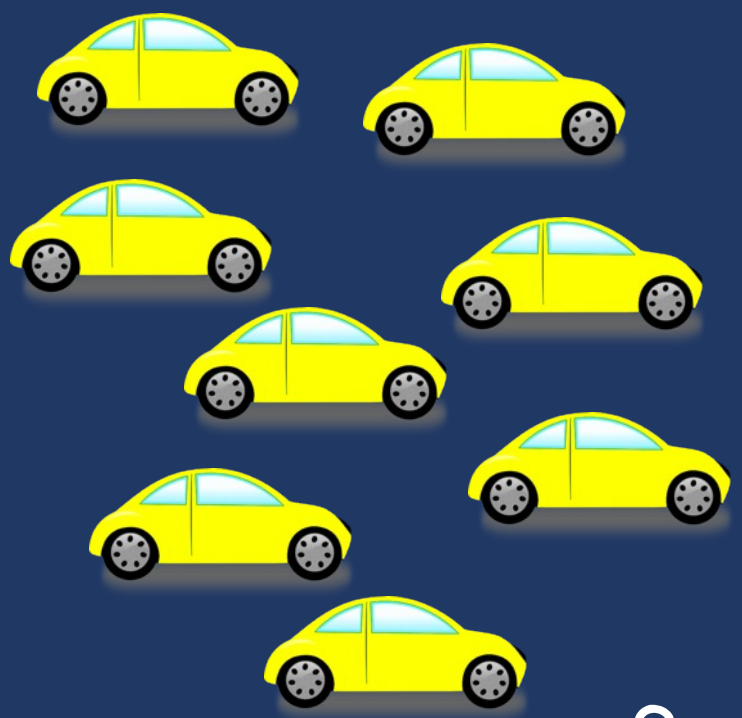
What's a Comparison story to show multiplication?

Equal Groups

(Partitive Division)

Division

Show the dividend, divide equally among divisor, count quotient



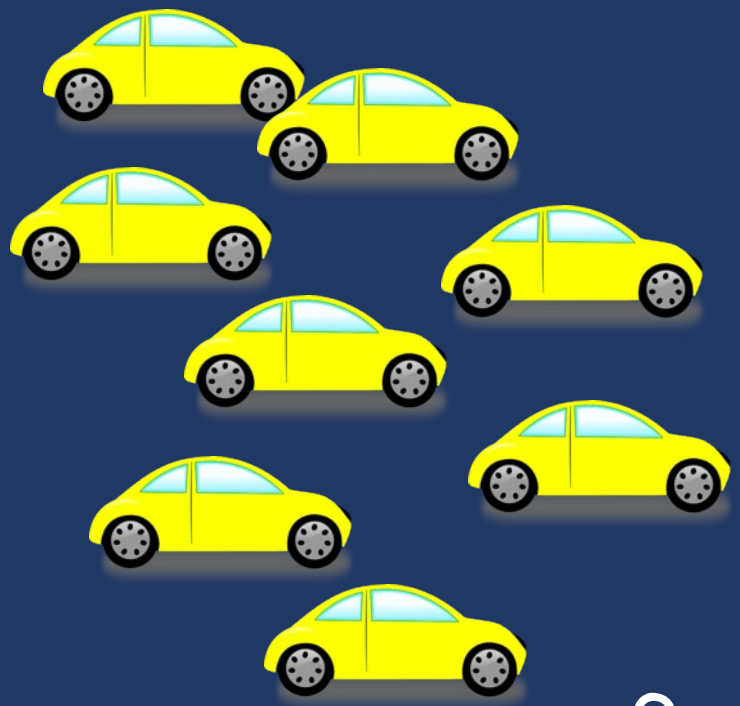
$$8 \div 2 = 4$$

Equal Groups

(Quotative Division)

Division

Show the dividend, make groups of the divisor, count groups



$$8 \div 2 = 4$$

Equal Groups

Groups multiplied by number in each group for a product

Taylor has 12 pencils. She wants to share them equally among her 2 friends. How many pencils will each friend receive?

Taylor has 12 pencils. She put them into pencil pockets with 6 pencils each. How many pencil pockets did Taylor use?

$12 \div 4 = \_\_$

If you like comedies:

What's a Partitive story to show division?

If you like dramas:

What's a Quotative story to show division?

Total

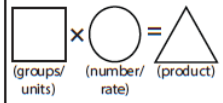
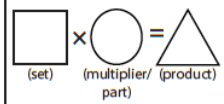
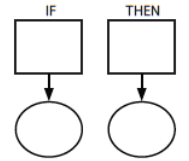
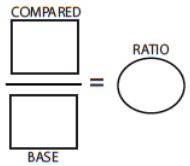
Difference

Change

Equal Groups

Comparison

Ratios/Proportions

Schema and Definition	Graphic Organizers	Examples			Variations
Equal Groups (Vary) A number of equal sets or units	GR x N = P  	Product unknown: Maria bought 5 cartons of eggs with 12 eggs in each carton. How many eggs did Maria buy?	Groups unknown: Maria bought 60 eggs. The eggs were sold in cartons with 12 eggs each. How many cartons of eggs did Maria buy?	Number unknown: Maria bought 5 cartons of eggs for a total of 60 eggs. How many eggs were in each carton?	With rate: Maria bought 5 cartons of eggs. Each carton cost $2.95. How much did Maria spend on eggs?
Comparison One set as a multiple or part of another set	S x T = P  	Product unknown: Malik picked 7 flowers. Danica picked 3 times as many flowers. How many flowers did Danica pick?	Set unknown: Danica picked 3 times as many flowers as Malik. If Danica picked 21 flowers, how many flowers did Malik pick?	Times unknown: Malik picked 7 flowers. Danica picked 21 flowers. How many times more flowers did Danica pick?	With fraction: Malik picked 25 red and yellow flowers. If 1/5 of the flowers were yellow, how many were red?
Ratios/ Proportions (Percentages; Unit Rate) Relationships among quantities Ratio	  	Subject unknown: Sally typed 56 words in 2 minutes. How many words could Sally type in 7 minutes? Base unknown: Justin baked cookies and brownies. The ratio of cookies to brownies was 3:5. If he baked 15 cookies, how many brownies did he bake?	Object unknown: Sally typed 56 words in 2 minutes. How many minutes would it take Sally to type 192 words? Compared unknown: Justin baked cookies and brownies. The ratio of cookies to brownies was 3:5. If he baked 25 brownies, how many cookies did he bake?	Ratio unknown: Justin baked 15 cookies and 25 brownies. What's the ratio of cookies to brownies?	With percentage: Watson received an 80% on his science quiz. If the test had 40 questions, how many questions did Watson answer correctly? With unit rate: Paula bought 5 boxes of markers. She spent $9.75. What is the price of one box of markers?

Material collected from: Jitendra, DiPipi, & Perron-Jones, 2002; Jitendra & Star, 2011; Jitendra et al., 2009; Van de Walle et al., 2013; Xin, Jitendra, & Deatline-Buchman, 2005; Xin & Zhang, 2009.

Equal Groups

Multiplicative Word Problems

J. Lola baked 6 pies. For each pie, Lola used 5 apples. How many apples did Lola use?	K. Jane bought 112 light bulbs. The light bulbs come in packs of 4. How many packs of light bulbs did Jane buy?
L. Zachary has 3 feet of string. He makes braclets, and each bracelet needs 5 1/4 inches of string. How many bracelets could Zachary make?	NOTES ABOUT EQUAL GROUPS PROBLEMS:

Equal Groups

Array
Vary

Groups multiplied by **number in each group** for a **product**

Mandy has 2 boxes. There are 6 muffins in each box. How many muffins does Mandy have?

Product

Mandy has 12 muffins. They want to place them equally into 2 boxes. How many muffins will Mandy place in each box?

Number in each group

Mandy has 12 muffins. They put them into boxes with 6 muffins each. How many boxes did Mandy use?

Groups

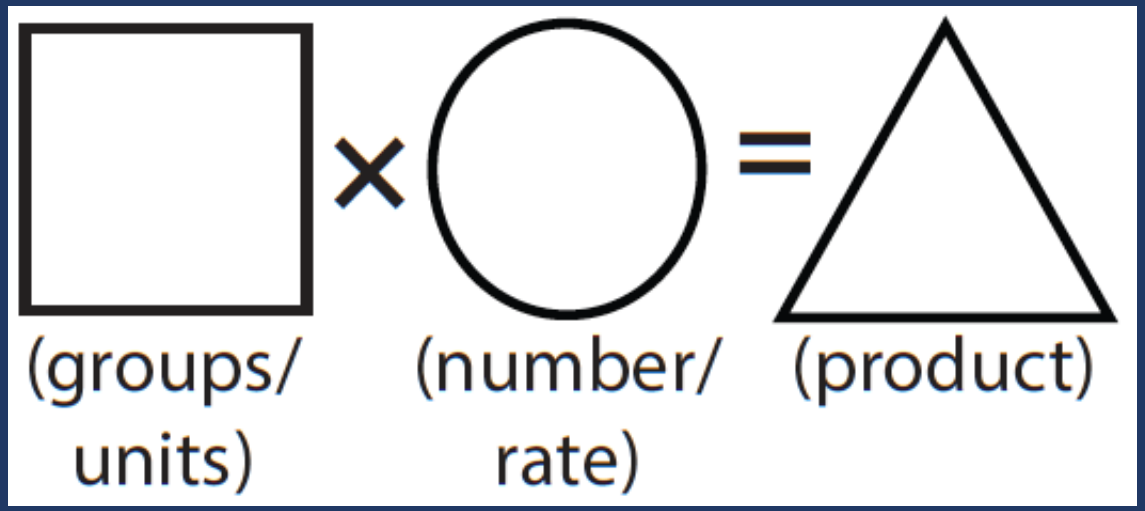
Equal Groups

"Are there groups with an equal number in each group?"

Equal Groups

GR × N = P

GR × E = P



Equal Groups

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Equal Groups

Share an Equal Groups problem.

Comparison

Multiplicative Word Problems

M. Enrique has 2 times as many pencils as Ava. Ava has 6 pencils. How many pencils does Enrique have?	N. Susan has 7 times as many books as Mo. Mo has 18 books. How many books Susan has?
NOTES ABOUT COMPARISON PROBLEMS:	

Comparison

Set multiplied by a number of times for a product

Joan ran 6 minutes. L'Tanya ran 4 times longer than Joan. How many minutes did L'Tanya run?

Set

Number of times

Product

Equal Groups

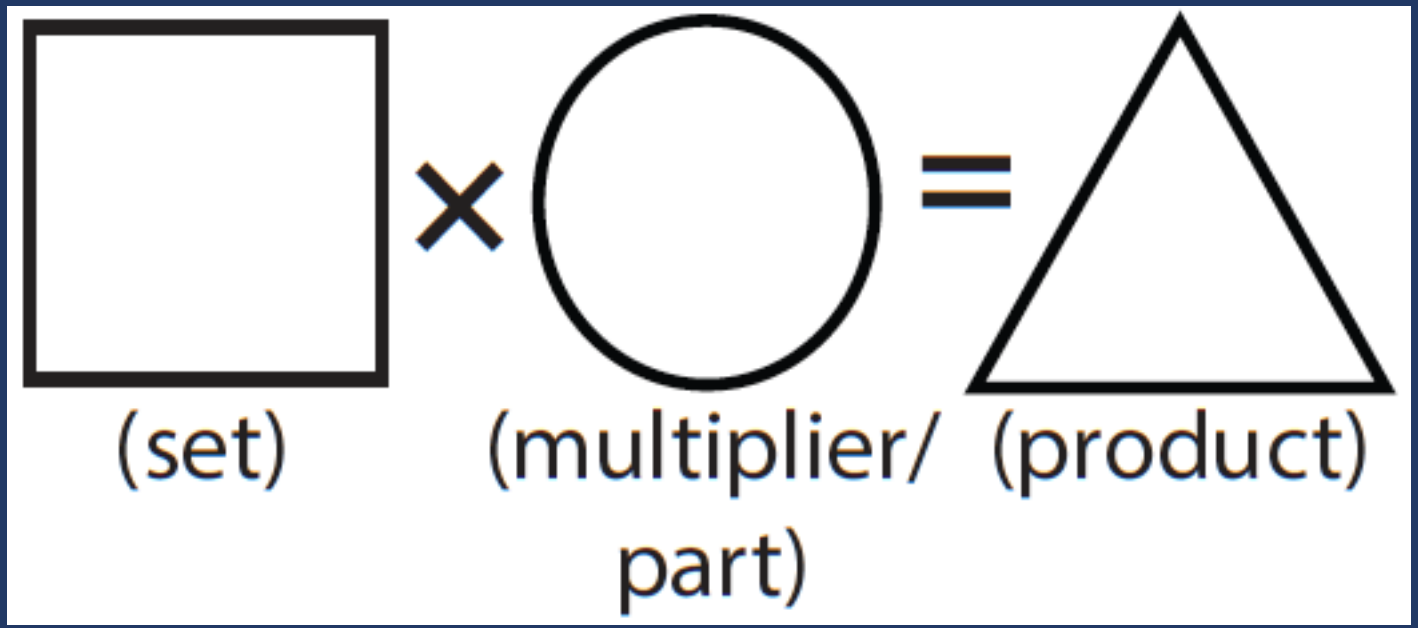
"Are there groups with an equal number in each group?"

Comparison

"Is a set compared a number of times?"

Comparison

S × T = P



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NOTES ABOUT COMPARISON PROBLEMS:	

Comparison

Share a Comparison problem.

Ratios/Proportions

Multiplicative Word Problems

O. Sally typed 56 words in 2 minutes. At this rate, how many words could Sally type in 7 minutes?	P. The number of blueberry muffins that a baker makes each day is 40% of the total number of muffins she makes. On Monday, the baker makes 36 blueberry muffins. What is the total number of muffins that the baker makes on Monday?
Q. Margarita baked cookies and brownies. The ratio of cookies to brownies was 3:5. If she baked 25 brownies, how many cookies did she bake?	NOTES ABOUT RATIOS OR PROPORTIONS PROBLEMS:

Ratios/Proportions

Description of relationships among quantities

Melissa baked cookies and brownies. The ratio of cookies to brownies was 3:5. If she baked 25 brownies, how many cookies did she bake?

Emma typed 56 words in 2 minutes. At this rate, how many words could Emma type in 7 minutes?

Equal Groups

"Are there groups with an equal number in each group?"

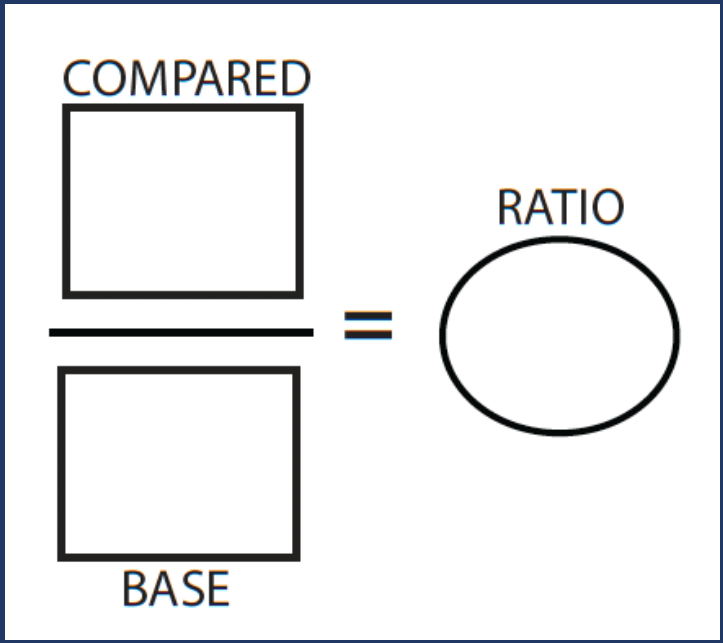
Comparison

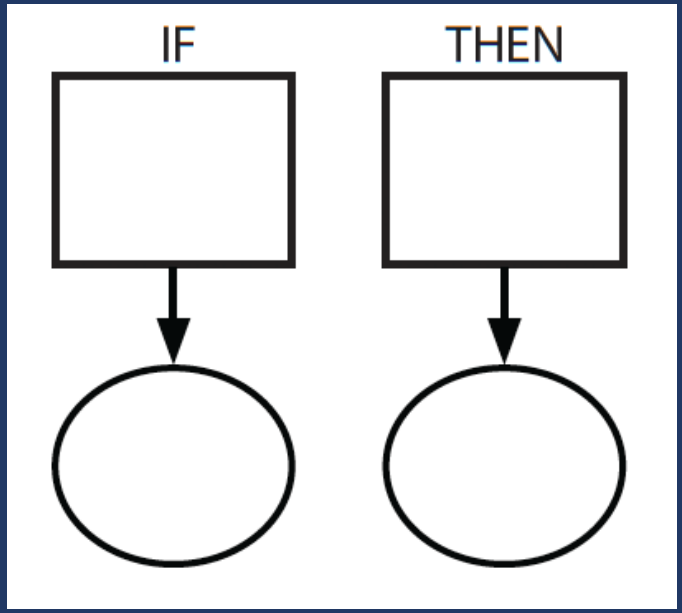
"Is a set compared a number of times?"

Ratios/Proportions

"Are there relationships among quantities - if this, then this?"

Ratios/Proportions





Xin et al. (2005)

Ratios/Proportions

Multiplicative Word Problems

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Q. Margarita baked cookies and brownies. The ratio of cookies to brownies was 3:5. If she baked 25 brownies, how many cookies did she bake?	NOTES ABOUT RATIOS OR PROPORTIONS PROBLEMS:

Ratios/Proportions

Share a Ratios or Proportions problem.

Schema Check!

Equal Groups

Mr. Kowolski ordered 35 boxes of granola bars. Each box contained 24 granola bars.

What is the total number of granola bars Mr. Kowolski ordered?

Grade 4 PARCC

Ratios/Proportions

A company makes 625 cell phone cases each day. How many cell phone cases does the company make in 31 days?

Grade 5 STAAR

Comparison

Danielle's full-grown dog weighs 10 times as much as her puppy. The puppy weighs 9 pounds.

Enter the number of pounds the full-grown dog weighs.

Grade 4 Smarter Balanced

Total

Difference

Change

Equal Groups

Comparison

Ratios/Proportions

Total

Difference

Change

Equal Groups

Comparison

Ratio/
Proportion

XX

Total

Difference

Change

Equal Groups

Comparison

Ratio/
Proportion

XX

Total

Difference

Change

Equal Groups

Comparison

Ratio/
Proportion

XX

Total

Difference

Change

Equal Groups

Comparison

Ratio/
Proportion

XX

Total

Difference

Change

Equal Groups

Comparison

Ratio/
Proportion

XX

Total

Difference

Change

Equal Groups

Comparison

Ratio/
Proportion

XX

Multi-Step Problems

R.
Leslie had 3 pizzas. Each pizza was cut into 8 slices. Leslie ate 2 slices. How many slices were left?

S.
Mr. Kahn gave away 8 blue balloons and 6 red balloons. He gave away 3 times the number of white balloons as red balloons. What was the total number of balloons Mr. Kahn gave away?

T.
An egg farm packages 264 total cartons of eggs each month. The farm has 3 different sizes of cartons.
The small carton hold 8 eggs, and 1/6 of the total cartons are small.
The medium carton holds 12 eggs, and 2/3 of the total cartons are medium.
The large carton holds 18 eggs, and the rest of the total cartons are large.

Determine how many each size of carton is needed each month. Then determine how many eggs are needed to fill the 264 cartons.

WORD PROBLEMS

What are your strengths?

What are your opportunities for growth?

What are your plans for next Monday?
Next month?
Next year?

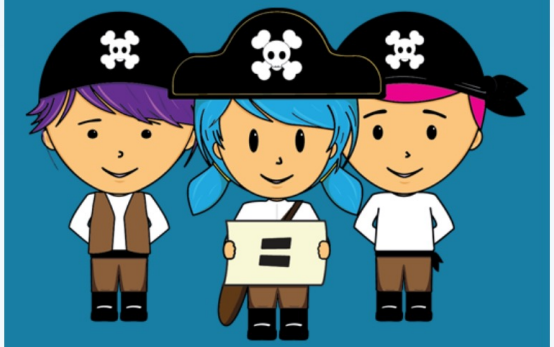
Pirate Math Equation Quest

About | Research | Individual | Small Group | STAAR | Videos

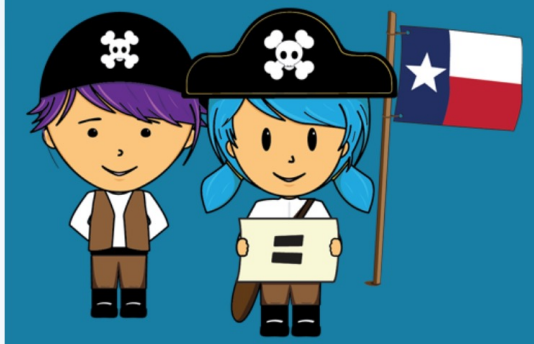
Welcome to Pirate Math Equation Quest!

Individual Word-Problem Intervention

Small-Group Word-Problem Intervention



Small-Group Word-Problem Intervention for STAAR



https://intensiveintervention.org

National Center on
INTENSIVE INTERVENTION
at American Institutes for Research

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Intensive Intervention | Tools Charts | Implementation Support | Intervention Materials | Information For...

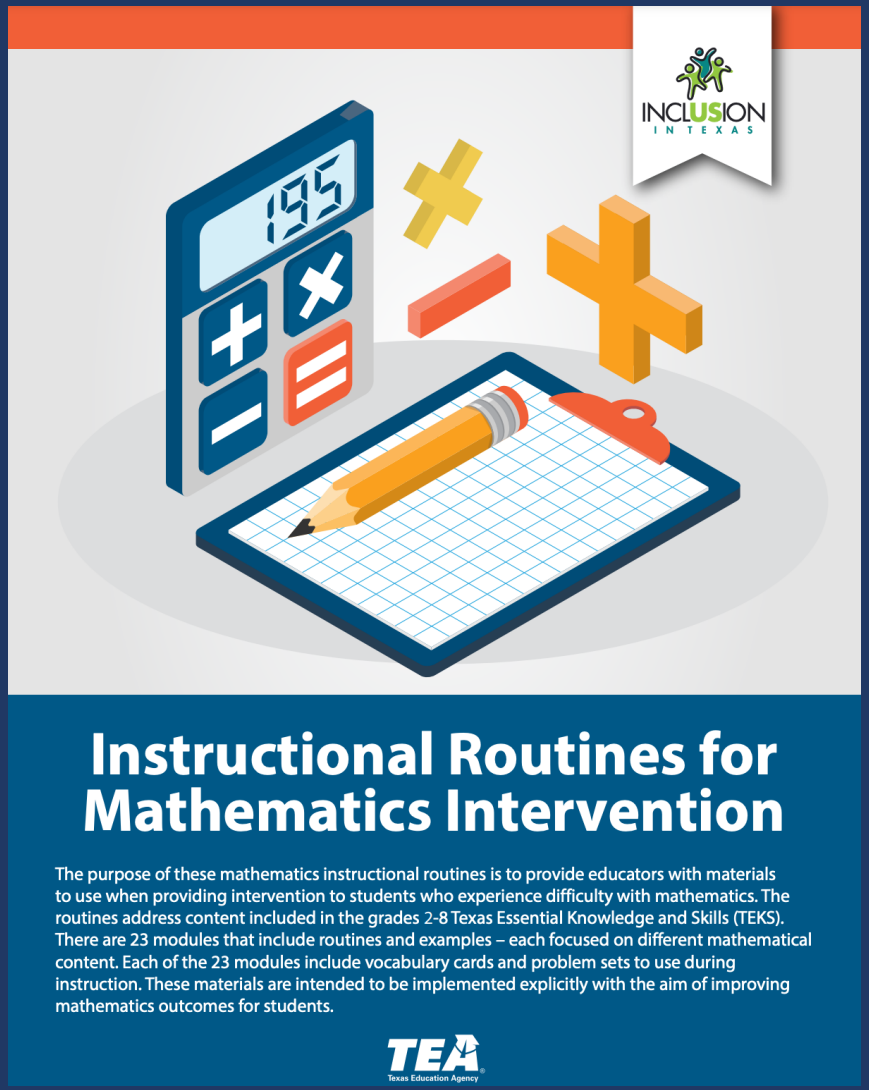
Intensive Intervention in Mathematics Course Content

NCII, through a collaboration with the University of Connecticut, developed a set of course content focused on developing educators' skills in designing and delivering intensive mathematics instruction. This content is designed to support faculty and professional development providers with instructing pre-service and in-service educators who are developing and/or refining their implementation of intensive mathematics intervention.

Intensive instruction was recently identified as a high-leverage practice in special education, and DBI is a research based approach to delivering intensive instruction across content areas (NCII, 2013). This course provides learners with an opportunity to extend their understanding of intensive instruction through in-depth exposure to DBI in mathematics, complete with exemplars from actual classroom teachers.

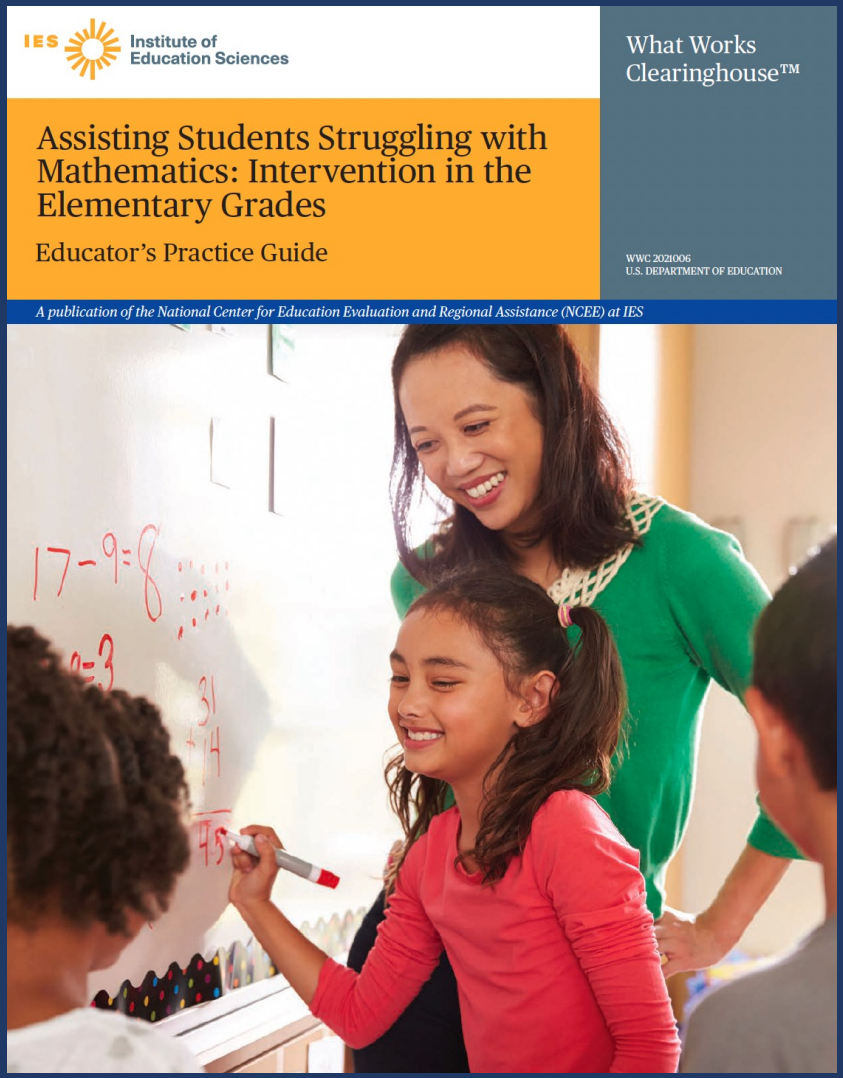
NCII, through a collaboration with the University of Connecticut and the National Center on Leadership in Intensive Intervention and with support from the CEEDAR Center, developed course content focused on enhancing educators' skills in intensive mathematics intervention. The course includes eight modules that can support faculty and professional development providers with instructing pre-service and in-service educators who are learning to implement intensive mathematics intervention through data-based individualization (DBI). The content in this course complements concepts covered in the Features of Explicit Instruction Course and so we suggest that users complete both courses.

MODULE 5: INTENSIVE MATHEMATICS INTERVENTION: INSTRUCTIONAL STRATEGIES



https://spedsupportstage.tea.texas.gov/resource-library/instructional-routines-mathematics-intervention

https://ies.ed.gov/ncee/wwc/PracticeGuide/26



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