# Build your own Strip Diagram Chart

The main idea is that in a strip diagram the two "strips" need to be equal. Strip diagrams are a visual way to learn how to set up an equation for a word problem.

Scholars will create this "cheat sheet" which they can use, if they need it, for the rest of the work in this unit.

This chart will help them learn how to represent the main kinds of problems in this unit.

Scholars can keep their chart in their work folder and refer back to it, if they need it, for examples of how to work the other problems in the unit.

## Instructions:

First figure out the side with no numbers. Help the scholars complete the strip diagram without numbers

Then turn it over and complete the strip diagrams with numbers and write the accompanying equation.

If you think it will benefit your scholar, bring some manipulatives. Get 60 "beans" and 3 zip lock bags and have your scholar "act out" the problems with the beans to help them visualize.

**IMPORTANT**: A very common problem scholars have with working out multiple step word problems is that they stop after the first step. The test makers know this, so they almost always have that as one of the multiple choice incorrect answers. So please emphasize that they always need to check and make sure they have done the WHOLE problem.

\*\*\* Scholars can keep their completed copies of the chart in their folders for future reference. \*\*\*

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Fre	Fred had a bag of candy. He ate part of it. How much does he have left?	ste part of it	. How much o	does he hav	ve left?		Fred had a b has left?	Fred had a bag of 20 pieces of candy. He ate 10 has left?	f candy. He a	ste 1(
		Whole	Whole bag of candy	candy				Ŵ	Whole bag o	80
	Part Fred ate	l ate		Part t	Part that's left	eft	4	Part Fred ate (10)	te (10)	
							Equation: 20 – 10 = c	0 – 10 = c		
a.	Fred had a bag of candy. He ate part of it. He divided the rest between his two brothers.	ate part of i	t. He divided	the rest be	etween his	two brothers.	Fred had a b his two broth	Fred had a bag of 20 pieces of candy. He ate 10 his two brothers What is b, the amount each	candy. He a	ate 1( each
		Whole	Whole bag of candy	candy				Ň	Whole bag o	60
	Part Fred ate	l ate	Part	Part for brother	_	Part for brother	4	Part Fred ate (10)	te (10)	
							Equation: 20	Equation: 20-10=10. 10÷2=b	2 = b	1
a.	Fred had 3 bags of candy. Ho	w much car	candy. How much candy does he have in all?	ave in all?			Fred had 3 b	Fred had 3 bags of candy with 20 pieces in each all?	20 pieces ir	1 each
	Bag		Bag		ĝ	Bag		Bag (20)	8	Bag
	Total am	iount o	tal amount of candy Fred has in all	Fred h	as in a	lle		Total amount of can	unt of c	an
							Equation: 20	Equation: 20 + 20 + 20 = c		
Fre	Fred had 3 bags of candy. He	divided it e	candy. He divided it evenly among his 5 best friends.	his 5 best	friends.		Fred had 3 b friends. Wha	Fred had 3 bags of candy with 20 pieces in each friends. What is f, the amount of candy each fri	20 pieces ir of candy ea	n each
	Bag		Bag	_	Bâ	Bag		Bag (20)	8	Bag
	Amount for Amou friend fri	Amount for friend	Amount for friend	Amount for friend	_	Amount for friend	Amou	Amount for Amount for friend (f) friend (f)	<u> </u>	Amour frier
							Equation: 20	Equation: 20 + 20 + 20 = 60. 6	60÷5=f	
frie P	Fred had 3 bags of Candy. He friends.	e ate part of	f it, and he div	vided the re	est evenly	Candy. He ate part of it, and he divided the rest evenly among his 5 best		Fred had 3 bags of Candy with 20 pieces of candy in ear among his 5 best friends. What is <i>f</i> , the amount of cand	ieces of candy	/ in ea
		-	200	$\vdash$				Bag (20)		Bag (
_	bag	_	Bag	-	bag	<u>م</u>			Amount	Ame
	Part Fred ate	Amount for friend	Amount for friend	Amount for friend	Amount for friend	Amount for friend	Liev	Part Fred ate (10)	for friend (f)	for f
_			4		4	+	Equation: 20	Equation: 20 X 3 = 60. 60 - 10 = 50. 50 ÷ 5 = f	) = 50. 50 ÷	5=f

# With Numbers

Frec	Fred had a bag of 20 pieces of candy. He ate 10 pieces. What is c, the amount of candy Fred has left?	of candy. H	e ate 10 pieces	s. What is c	, the amoun	it of candy F	e
	>	/hole b	Whole bag of candy (20)	1dy (20	6		
	Part Fred ate (10)	ate (10)		art th	Part that's left (c)	: (c)	
Equ	Equation: 20 – 10 = c						
Fred his t	Fred had a bag of 20 pieces of candy. He ate 10 pieces. He divided the rest evenly between his two brothers. What is $b$ , the amount each brother got? .	of candy. H	20 pieces of candy. He ate 10 pieces. He di What is b, the amount each brother got? .	s. He divide r got? .	d the rest e	venly betwe	e
	>	/hole b	Whole bag of candy (20)	ndy (20	()		
	Part Fred ate (10)	ate (10)	-	Part for brother (b)	-	Part for brother (b)	
Equ	Equation: 20 – 10 = 10. 10	10÷2=b					
Fred all?	Fred had 3 bags of candy with 20 pieces in each What is c, all?	th 20 pieces	in each What	is c, the ar	nount of car	the amount of candy Fred has in	. <u>e</u>
	Bag (20)		Bag (20)		Bag (20)	20)	
	Total amount	ount of	of candy Fred has in all (c)	red ha	s in all	(c)	
Equ	Equation: 20 + 20 + 20 = c						
Fred	Fred had 3 bags of candy with 20 pieces in each. He divided it friends. What is $f_r$ the amount of candy each friend received?	th 20 pieces nt of candy	in each. He d each friend re	ivided it ev ceived?	He divided it evenly among his 5 best hd received?	his 5 best	
	Bag (20)		Bag (20)		Bag (20)	20)	
	Amount for Amo friend (f) fri	Amount for friend (f)	Amount for friend	Amount for friend (f)		Amount for friend (f)	
Equ	Equation: 20 + 20 + 20 = 60.	60÷5=f					
Fred	Fred had 3 bags of Candy with 20 pieces of candy in each. He ate 10 pieces, and he divided the rest evenly among his 5 best friends. What is f, the amount of candy each friend received?	pieces of can f, the amoun	dy in each. He a t of candy each f	te 10 pieces riend receiv	, and he divid sd?	ed the rest ev	Å
	Bag (20)		Bag (20)		Bag (2	(20)	
	Part Fred ate (10)	Amount for friend	Amount for friend	Amount for friend	Amount for friend	Amount for friend (/)	
į	00 00 - 5 A 05 - 50			10	44	**	

Fred had a bag of candy. He ate part of it. How much does he have left?

Fred had a bag of candy. He ate part of it. He divided the rest between his two brothers.

Fred had 3 bags of candy. How much candy does he have in all?

Fred had 3 bags of candy. He divided it evenly among his 5 best friends.

Fred had 3 bags of Candy. He ate part of it, and he divided the rest evenly among his 5 best friends.

Fred had a bag of 20 pieces of candy. He ate 10 pieces. What is *c*, the amount of candy Fred has left?

Equation:

Fred had a bag of 20 pieces of candy. He ate 10 pieces. He divided the rest evenly between his two brothers, Pete and Ralph. What is *b*, the amount each brother got? .

Equation:

Fred had 3 bags of candy with 20 pieces in each What is *c*, the amount of candy Fred has in all?

## Equation:

Fred had 3 bags of candy with 20 pieces in each. He divided it evenly among his 5 best friends. What is *f*, the amount of candy each friend received?

### Equation:

Fred had 3 bags of Candy with 20 pieces of candy in each. He ate 10 pieces., and he divided the rest evenly among his 5 best friends. What is *f*, the amount of candy each friend received?

Equation: