#### Activity Sheet 1: Using Multiplication by 10

**Directions**: Solve each problem with a ratio table. Use the strategy of multiplying by 10. You may not need to use every column in the ratio table.

Example: There are 5 pieces of gum in a pack. How many pieces of gum are in 10 packs?

Pack

1 10

Pieces 5 50

1) There are 6 desks per row. How many desks are there in 10 rows?

Rows	1	10	
Desks	6	(00)	

2) There are 3 birds per nest. How many birds are there in 10 nests?

CATAL	,	XIO	
Nests	1	16	
Birds	3	30	
	3	KIO	

(30 birds

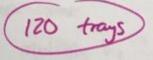
3) There are 4 students per table. How many students are there at 10 tables?

Tables	1	10	
Students	4	40	

40 Students

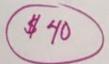
4) Two trays contained 12 ice cubes. How many ice cubes are there in 20 trays?

		X10	
Trays	2	20	Ī
Ice Cubes	12	120	1
	*/	P	ī



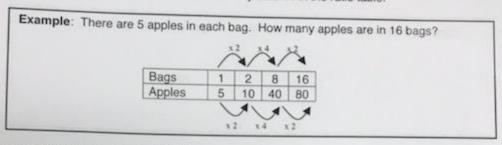
5) Jon gets paid \$4 for every 3 hours he works. How much will he get paid if he works 30 hours?

Hours worked	3	30	
Dollars earned	4	40	

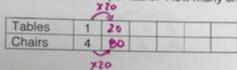


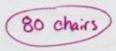
# Activity Sheet 2: Using Multiplication by Any Number

**Directions**: Solve each problem with a ratio table. Use multiplication to help you arrive at the answer. You may not need to use every column in the ratio table.



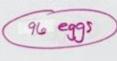
1) There are 4 chairs per table. How many chairs are there for 20 tables?





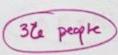
2) There are 12 eggs in every carton. How many eggs are there in 8 cartons?

Cartons	1	8		
Eggs	12	96		



3) Three people can fit in each rowboat. How many people can fit into 12 rowboats?

Rowboats	1	12		
People	3	36		



4) You can buy 8 balloons for \$1. How many balloons can you buy for \$8?

Here is Melia's solution strategy:

Dollars	1	2	4	8		
Balloons	8	16	32	64		

Explain Melia's Strategy



multiply by 2

Now... solve this problem in a different way.

Dollars	I	0		
Dollars		0	_	
Balloons	8	64		



Name: \_\_\_

## Activity Sheet 3: Using the Doubling Strategy

**Directions**: Solve each problem with a ratio table. Use "doubles" to help you arrive at the answer. You may not need to use every column in the ratio table.

Example: Gasoline costs \$4 per gallon. How much does it cost to buy 8 gallons?

	ř	2/	2/	2
Gallons	1	2	4	8
Dollars	4	8	16	32

1) Each student has 2 shoes. How many shoes are there for 8 students?

	/	V	~	3	
Students	1	2	4	8	
Shoes	2	4	8	16	

16 shoes

2) There are 12 eggs in every carton. How many eggs are there in 4 cartons?

	-	V	7	
Cartons	1	2	4	
Eggs	12	24	48	

48eggs

3) There are 8 M&M's in every mini-bag. How many M&M's are there in 16 mini-bags?

	-	~/	~	~	-	
mini-bags	1	2	4	8	160	
M&M's	8	16	32	44	158	

128 M + M'S

4) There are 6 chairs for every 3 tables. How many chairs are there for 12 tables?

	-	~		
Tables	3	6	12	
Chairs	6	12	24	

24 chairs

5) 5 students need 20 crayons. How many crayons do 40 students need?

	-	~	~		
Students	5	10	20	40	
Cravons	70	40	80	160	1 2

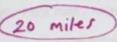
160 crayons

#### Activity Sheet 4: Using the Halving Strategy

**Directions**: Solve each problem with a ratio table. Use "halves" to help you arrive at the answer. You may not need to use every column in the ratio table.

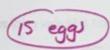
1) It takes 10 hours to ride a bike 40 miles. How far can you ride in 5 hours?

	1	~	
Hours	10	5	
Miles	40	20	



2) 60 eggs fit into 4 baskets. How many eggs fit into one basket?

	-	1		
Baskets	4	2	1	
Faas	60	30	15	



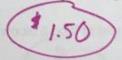
3) You can buy 12 apples for \$4. How much does it cost to buy 6 apples?

Apples	12	6	
Cost	4	2	



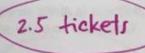
4) You can buy 20 oranges for \$6. How much would it cost to buy 5 oranges?

	-	~	1	
Oranges	20	10	5	
Cost	6	3	1.5	



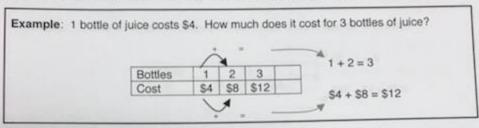
5) 32 students need to sell 80 raffle tickets. If the students split it up evenly, how many tickets does each student need to sell on his or her own?

				Y	THE LOCAL PROPERTY AND ADDRESS OF THE PARTY AN	
Students	32	16	8	4	2	-
Tickets to sell	80	40	20	10	5	2.5



#### Activity Sheet 5: Using Addition

**Directions**: Solve each problem with a ratio table. Use addition across columns to help you arrive at the answer. You may need to use some other strategies as well (like doubling, multiplication, etc.). You may not need to use every column in the ratio table.



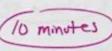
 It takes 1 minute to travel 2 miles on the high speed train. How many miles can you travel in 12 minutes?

	-	W	2		
Minute	1	2	10	12	
Miles	2	4	20	24	



2) It takes 2 minutes to run 1 lap around the track. How long would it take to run 5 laps?

Laps	1	2	3	5	
Minutes	2	4	6	10	



6) One t-shirt costs \$6. 3 shirts cost \$18. How much does it cost to buy 4 shirts?

Shirts	1	3	4	
2111112	-	\$18		



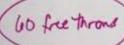
7) You can buy 10 cherry tomatoes for \$6. How much would it cost to buy 15 tomatoes?

Tomatoes	00	5	15	
Cost	(\$6	3	9	



8) Each player on the basketball team needs has to shoot 5 free-throw shots at practice. There are 12 players on the team. How many shots in all will be taken by the team?

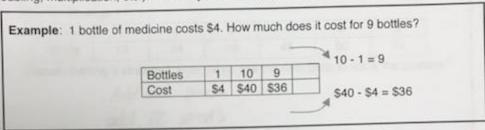
	1	~	1000		
Players	11	12			
Free throws	5	60			
1100 1110110	1	7			



Namo:		
Namo:		

### Activity Sheet 6: Using Subtraction

**Directions**: Solve each problem with a ratio table. Use subtraction across two columns to help you arrive at the answer. You may need to use some other strategies as well (like doubling, multiplication, etc.). You may not need to use every column in the ratio table.



1) It takes 1 minute to pump 2 gallons of gas. How many minutes does it take to pump 19 gallons of gas?

A diameter	4	10	20-	40	
Minutes	-	-	and the same		
Gallons	+2	20	40	38	

2) Each pizza contains 6 slices. How many slices in 8 pizzas?

Pizzas	1	2	10	8	
Slices	6	12	40	48	

48 minutes

3) In a big storm, rain fell at the rate of 2 centimeters every hour for an entire day. How much rain had fallen after 18 hours?

ilida i i i i i i i i i i i i i i i i i i	3	yo !	2			
Hours	1	10	20	2	18	
Centimeters	2	26	40	4	36	
			-			



4) One baseball cap costs \$5. How much would 14 caps cost?

Cans	1 (10	5	15	14	
Cost	\$5 (\$50	25)	75	90	



5) You can buy 10 bananas for \$6. Therefore, 50 bananas cost \$30. How much would it cost to buy 45 bananas?

Bananas	10	50	5	45	
Cost	6	30	3	27	

Name:			

### Activity Sheet 7: Solving Problems with Ratio Tables

Sammy is helping his parents plant a garden. He goes to the store and finds that corn seeds come in small packs. Each pack of seeds contains 12 seeds. How many seeds will he get if he buys 6 packs? He solves the problem 4 different ways.

#### Solution Strategy #1

Packs	1	2	3	4	5	6
Seeds	12	24	36	48	60	72

Explain Sammy's strategy? How did he use the ratio table to solve the problem?

Add one pack add 12 seeds

#### Solution Strategy #2

Packs	1	2	3	6
Seeds	12	24	36	72

Explain Sammy's strategy? How did he use the ratio table to solve the problem?

add one pack, then double after 3 add 12 packs, then double

# Solution Strategy #3

	J2			
Packs	1	10	5	6
Seeds	12	120	60	72

Explain Sammy's strategy? How did he use the ratio table to solve the problem?

XID : 2, then add 1 pack to 5 packs add 12 seeds to 60 seeds

tion Strate	av #4	XL	11	XS	
Packs	1	2	4	8	6
Seeds	12	24	48	96	72

Explain Sammy's strategy? How did he use the ratio table to solve the problem?

doubling, then subtract 8 packs minus 2 and subtract 96 seeds minus 24

Now YOU solve the problem, using any strategy you prefer.

Sammy is helping his parents plant a garden. He goes to the store and finds that corn seeds come in small packs. Each pack of seeds contains 12 seeds. How many seeds will he get if he buys 6 packs?

Explain your strategy.

multiply by Le

Why did you choose the strategy that you did?

quickest way to arrive at le packs

Man-		
Name:		

#### Activity Sheet 8: Solving Problems with Ratio Tables

Problem: Silver City Middle School needs a new gym floor. The gym floor tiles come in boxes of 45 tiles per box. Mr. Sheffield, the gym teacher, ordered 16 boxes of tiles. Three students used a ratio table to find out how many tiles were in all 16 boxes.

Becky solved the problem this way	Becky	solved	the	problem	this	wav:
-----------------------------------	-------	--------	-----	---------	------	------

Boxes	1	2	3	4	5	6	7	8	16
Tiles	45	90	135	180	225	270	315	360	720

Explain Becky's thinking. How did Becky use the ratio table?

Ann solved the problem this way:

	/	1	1	1	1
Boxes	1	2	4	8	16
Tiles	45	90	180	360	720
	-	71	>	7	

Explain Ann's thinking. How did Ann use the ratio table?

dubling each time

Brian solved the problem this way: 3

1	(10)	2	6	16				
45	(450)	90	270	720				
	1 45	1 (10)	1 (10) 2	1 (10) 2				

Explain Brian's thinking. How did Brian use the ratio table?

x3 Add

Question: Which of these strategies do you like the best? Why?

Answers will vary

Directions: Use a ratio to strategies you'd like to us prepared to share and example.  1. A tube contains 3 ten	able to s se. You xplain yo	may not nour strateg	llowing pr	oblems. e columi	Use any	combinat	ion of	
strategies you'd like to us prepared to share and es 1. A tube contains 3 ten	se. You xplain yo	may not nour strateg	eed all tri	e coluiii	Use any	combinat	ion of	
Tube	nis balls			ai ti ioi.	10 111 1110 1			
	-	. How ma	ny tennis	balls are	there in	32 tubes	900 6	1
	1	32						
Tennis Balls	3	94						1
2. Sunglasses cost \$8.	How m	uch will it o	cost to buy	y 12 sun	glasses?	#96	0	7
Sunglasses	1	12						
Cost	8	94				1		_
Cost  4. At the zoo, the lions	2 3 eat 25 p	12 18 counds of r	neat a da	y. How	much wo	uld they e	at in one	175 lbs
week (7 days)?	?	-						
Meat (16)	25	175						
Days	- ' -	-1						
5. At the same zoo, 50 visitors can see the	visitors	38 a day	ed into the ? The zoo	monke o is ope	y exhibit on for 8 ho	each hou urs each	day.	400 visitor
Visitors	50	400						
Hours	1	8		1				
6. It costs \$12 per students to visit the	dent to g	get into the	zoo. Ho	w much	would it	cost for a	group of	21 # 252
Studentr		21						
Cost	12	252		-				
7. Every 4 hours, the after 11 hours?	doctor s	sees 8 pati	ents. Ho	w many	patients	does the	doctor se	e zz patient
Hours	4	2 1	11					
Patients Seen	8	4 2	27					28
	: 1	12						

# Activity Sheet 10: Ratio Table Strategy Review

You have solved many problems in this book with ratio tables. You probably used familiar strategies like these:

Multiply by 10

1	10
15	150

2 Multiplying 50

Doubling

4	8
15	30

10 20 Halving 15 30

Adding

1	2	3
25	50	75

Subtracting

1	10	9
12	120	108

6

150

Find the missing numbers in the shaded boxes in the ratio tables below. Then write which of the above strategies you used.

1.

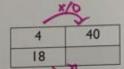
1	10	9
18	180	142

Subtractino Strategy:

	/	3	1
3.	1	10	20
	12	120	

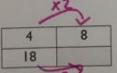
Strategy: Multiplying / Doubling

5.



Strategy:\_

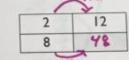
7.



Strategy:

10 5 2. 180 90 18

4.

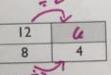


Strategy:

XS 10 12

Strategy:

8.



Strategy: