AchieveMath

Student Book Volume 2

Name:



Unit 3: Adding and Subtracting Tens

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Spring Decorations

		I start with	When I add 10, I have	
		tens	tens	
1.	27 + 10	ones	ones	27 + 10 =
		tens	tens	
2.	53 + 10	ones	ones	53 + 10 =
		tens	tens	
3.	40 + 10	ones	ones	40 + 10 =

		I start with	When I subtract 10, I have	
		tens	tens	
4.	30 – 10	ones	ones	30 – 10 =
		tens	tens	
5.	57 – 10	ones	ones	57 – 10 =
		tens	tens	
6.	92 – 10	ones	ones	92 – 10 =

Directions: Have students model the first number in the expression with base-10 blocks and record the number of tens and ones. Students add or subtract, then record the new number of tens and ones and the sum or difference.

Balloon Archways



Directions: Have students use base-10 blocks to add or subtract to complete the equation.

Lesson 21 Exit Ticket

		I start with	When I add or subtract 10, I have	
		tens	tens	
1.	29 – 10	ones	ones	29 – 10 =
		tens	tens	
2.	50 + 10	ones	ones	50 + 10 =

- **3.** 47 + 10 = _____
- **4.** 89 10 = _____
- **5.** 92 10 = _____
- **6.** 11 + 10 = _____

Directions: Have students use base-10 blocks to model the addition or subtraction. **1–2)** Have students record the number of tens and ones in the starting number and ending number and complete the equations. **3–6)** Have students complete the equations.

Extra Practice: Pet Food Match Up



Directions: Have students use base-10 blocks to model the addition or subtraction. Then have students record the final number of tens and ones and then draw a line to the 2-digit number.

Sunnyside Games



2.

26 – 10 =				
Tens	Ones			

3.

Ones

Directions: Have students make base-10 drawings to add or subtract 10 and complete the equation.

Lawn Bowling

1. Show your addition on the number line.



2. Show your subtraction on the number line.



3. Use mental math to add or subtract.



4. Which place changes when you add or subtract 10?

Ones Tens

Directions: 1–2) Have students model adding 10 and subtracting 10 on a number line. **3)** Have students use mental math to add or subtract 10. **4)** Have students circle the answer to the question.

Lesson 22 Exit Ticket

1. Subtract with drawings.

Tens	Ones

49 - 10 = _____

2. Add with a number line.

55 + 10 = _____

3. Add or subtract with mental math.

63 - 10 = _____ 18 + 10 = _____ 75 + 10 = _____ 24 - 10 = _____

Directions: 1) Have students use the base-10 drawings to subtract 10. **2)** Have students model adding 10 on a number line. **3)** Have students use mental math to add or subtract 10.

Extra Practice: Mental Math Trail



Directions: Have students use mental math to add or subtract 10 along the path.

Beanbag Toss

Tens	Ones

Tens	Ones

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Arrow Lake Art Supplies

	Starting Number	Number of Markers Ordered	Number of Boxes	Total
1.	63	20		
2.	47	30		
3.	22	50		
4.	59	40		
5.	35	60		
6.	17	70		
7.	28	60		
8.	71	20		

Directions: Have students use base-10 blocks to represent the first addend. Then have students write the number of tens being added, model the addition, and write the sum.

Paintbrushes

	Starting Number	Number of Paintbrushes Ordered	Number of Boxes	Equation
1.	28	40	i	28 + 40 = 68
2.	44	40		
3.	56	20		
4.	37	60		
5.	32	30		
6.	45	50		
7.	58	20		
8.	62	20		

Directions: Have students use base-10 blocks to model the starting number. Then have them write the number of tens being added, model the addition with blocks, and write the equation.

Lesson 23 Exit Ticket

	Starting Number	Number of Paint Bottles Ordered	Number of Boxes	Equation
1.	14	40		
2.	27	50		
3.	36	20		

Directions: Have students use base-10 blocks to model the starting number. Then have them write the number of tens being added, model the addition with blocks, and write the equation.

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Extra Practice: Complete the Equation



Directions: Have students model each problem with base-10 blocks. Then have them add and write the sum.

Gym Class Challenge

1.	63 + 20 = ?	Tens	Ones
	20 = tens +		
	63 + 20 =		
2.	51 + 40 = ?	Tens	Ones
	40 = tens +		
	51 + 40 =		
3.	24 + 30 =		
	<		
4.	46 + 20 =		>

Directions: 1–2) Have students use the base-10 drawings to add multiples of 10 and record the total number of tens and ones. **3–4)** Have students model the addition on a number line.

Running in Place









Directions: Have students use the base-10 drawings to add multiples of 10. Have students model the addition on a number line.

Lesson 24 Exit Ticket



Directions: 1–2) Have students use the base-10 drawings to add multiples of 10. **3–4)** Have students model the addition on a number line.

Extra Practice: Fitness Trail



Directions: Have students use base-10 drawings to add 30 to each number. Have students circle their favorite exercise.

Keira's Goal

Tens	Ones

Tens	Ones

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Becca's Book Boutique

1.	50	2 tens
	20	1 ten
	90	6 tens
	10	5 tens
	60	9 tens

Торіс	Number of Books	Торіс	Number of Books
Whales	37	Turtles	50
Dolphins	12	Sharks	20
Crabs	29	Fish	60

2. How many books are about whales and turtles?

_____+ ____ = _____

3. How many books are about dolphins and sharks?

_____+ ____ = _____

4. How many books are about dolphins and fish?

_____+ _____ = _____

5. How many books are about crabs and turtles?

_____+ ____ = _____

Directions: 1) Have students draw lines to match the number to the number of tens. **2–5)** Have students use the table to identify the addends. Then, using any model they choose, have them find the sums and complete the equations.

Animal Books

1. Becca has 14 tiger books. She has 40 lion books. How many tiger and lion books in all?

_____+ ____+ _____ = ____54

_____+ ___ =

+ =

+ =

+ =

_____+ ____ =

- **2.** Becca has 20 wolf books. She has 53 dog books. How many wolf and dog books in all?
- **3.** Becca has 32 giraffe books. She has 10 zebra books. How many giraffe and zebra books in all?

4. Becca has 49 penguin books. She has 30 bear books. How many penguin and bear books in all?

 Becca has 50 chipmunk books. She has 47 squirrel books. How many chipmunk and squirrel books in all?

6. Becca has 24 rhino books. She has 60 hippo books. How many rhino and hippo books in all?

Directions: Read each problem. Have students use any model they choose to solve the problems and complete the equations.

Lesson 25 Exit Ticket

3 tens
4 tens
7 tens
8 tens

2. 35 + 30 = _____

3. 50 + 16 = _____

4. _____ = 42 + 40

Directions: 1) Have students draw lines to match the numbers to the number of tens. **2–4)** Using any model they choose, have students find the sums and complete the equations.

Extra Practice: Favorite Number











Directions: Have students find the sums, using any model they choose and showing their work.

Hundred Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Becca's Books

Tens	Ones

Tens	Ones

34 Lesson 25	
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Phoebe's Flowers

		l start with	I subtract	I end with
	50 - 40 =	tens	tens	ten
	30 – 10 =	tens	ten	tens
Ê	60 - 10 =	tens	ten	tens
	70 – 30 =	tens	tens	tens
P P	60 - 40 =	tens	tens	tens
	60 - 30 =	tens	tens	tens
40	40 - 30 =	tens	tens	ten
H	80 - 40 =	tens	tens	tens

Directions: Have students use base-10 blocks to represent the minuend. Then have students record the number of tens, subtract, and complete the equation.



Directions: Have students use base-10 blocks to model the problem. Then have students subtract the tens and complete the equations.

Lesson 26 Exit Ticket

		I start with	I subtract	I end with
1.	80 – 50 =	tens	tens	tens
2.	90 - 30 =	tens	tens	tens

3. 60 - 30 = _____

4. 20 - 10 = _____

Directions: Have students use base-10 blocks to model the problems. **1–2)** Have students record the tens and complete the equations. **3–4)** Have students complete the equations.
Extra Practice: Secret Message



Directions: Have students use base-10 blocks to model the subtraction. Then have students write the letter associated with each answer to reveal the message.

Music Practice



Directions: 1–2) Have students use the base-10 drawings to subtract tens. **3–4)** Have students model subtracting multiples of 10 on a number line.

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Spelling Practice

1.	50 – 30 = 20

Tens	Ones

Tens	Ones



2. 40 – 20 = _____

3. 70 – 40 = _____



Directions: 1–2) Have students make base-10 drawings and use them to subtract tens. **3–4)** Have students model subtracting tens on a number line.

Lesson 27 Exit Ticket



3. 90 – 40 = _____



4. 80 – 20 = _____

Directions: 1–2) Have students make base-10 drawings and use them to subtract tens. **3–4)** Have students model subtracting tens on a number line.

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Extra Practice: Squirrel Feeding Frenzy

	Tens	Ones
60 – 30		





	Tens	Ones
90 – 20		









Directions: Have students make base-10 drawings to represent the subtraction. Then have students draw a line to match the model with the difference.

Nia's Practice Minutes

Tens	Ones

Tens	Ones

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Emi's Knitting Nook

Emi has				
Yarn Colors	Balls			
Red	80			
Pink	70			
Blue	40			

Emi uses					
Projec	Balls				
	hat	10			
	mittens	20			
	sweater	40			

Pink Mittens

Emi has	balls. She uses	
---------	-----------------	--

How many are left? _____ = ____

Red Sweater

Emi has ______ balls. She uses _____.

How many are left? _____ = ____

Blue Hat

Emi has	balls. She uses	

How many are left? _____ = ____

Directions: Have students find the differences and complete the equations using any model they choose.

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Mitten Sales

1. Julani has 40 green mittens. She sells 30 of them.



2. Julani has 30 blue mittens. She sells 20 of them.

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How many are left? _____ = ____
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3. Julani has 60 yellow mittens. She sells 40 of them.

How many are left? _____ = ____

Directions: Have students find the differences and complete the equations using any model they choose.

Lesson 28 Exit Ticket

1. Emi has 50 tan hats. She sells 30 of them.

How many are left? _____ = ____

2. Emi has 70 pink hats. She sells 20 of them.

How many are left? _____ = ____

3. Emi has 60 red hats. She sells 40 of them.

How many are left? _____ – ____ = ____

4. Emi has 80 blue hats. She sells 20 of them.

How many are left? _____ = ____

Directions: Have students find the differences and complete the equations using any model they choose.

Extra Practice: Lin's Bouquets

ļ	80 – 30	=	gr	een		90 – 1	0 =	k	orown
ļ	50 – 20) =	blu	Je		90 – 2	20 =	F	ourple
	60 – 20) =	re	d		40 – 3	30 =	k	olack
9	90 – 70) =	уе	llow		80 – 2	20 =	(orange
	10	20	30	40	50	60	70	80	90

Directions: Have students find the differences and complete the equations using any model they choose. Then have students color the answer below with the corresponding color.

Hundred Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Open Number Lines

Place Value Mat (Tens and Ones)

Tens	Ones

Assessment

Unit 3 Assessment

1. 57 – 10 = _____

Ones

Show your subtraction on the number line.





3. 37 + 50 = _____



5. Finn has 70 green blocks. He gives 40 to his friend. How many blocks does Finn have now?

- _____ = _____



Unit 3 Cumulative Review

1. Count by 10s.



2. Kip and Kim want equal toys.



3. There are 7 puppies. 5 are black and white. How many are brown?



puppies are brown.

4. 9 bears are in the woods. 3 are looking. How many are hiding?



5. 10 + 6 = _____



6. Bali has 50 mittens. She sells 40 mittens.

How many mittens are left?	==	
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7. Write the number.

Tens	Ones
	••••

8. Compare.



9. How many?



10. Add.

58 + 20 = _____

Unit 4: Group and Change Word Problems within 20

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Mari's Tea Party

1. There are 16 teddy bears. 7 are black. 9 are brown.

_____ and _____ are the parts. _____ is the whole.

- Put the brown and black bears together. How many bears? _____
- Separate the brown bears. How many black bears? _____
- **2.** There are 12 cups. 4 are blue. 8 are red.

_____ and _____ are the parts. _____ is the whole.

- Put the red and blue cups together.
 How many cups? _____
- Separate the blue cups. How many cups are red? _____
- **3.** There are 14 sandwiches. 8 are jelly. 6 are honey.

_____ and _____ are the parts. _____ is the whole.

- Put the jelly and honey sandwiches together.
 How many sandwiches?_____
- Separate the jelly sandwiches. How many honey sandwiches?

Directions: Have students use linking cubes to model the situations and write the answers.

Mari's Pool Party

1. Mari has 13 pool floats. 6 are purple. 7 are yellow. Fill in the right column of the table.

Put the floats together.Separate the yellow floats.How many floats?How many purple floats?+ ____ = ________ = ____

2. There are 12 squirt toys. 9 are small. 3 are big.

Put the squirt toys together. How many squirt toys?

Separate the small squirt toys. How many big squirt toys?

_____ + _____ = _____

3. 17 children play in the pool. 11 children swim. 6 children float.

Put the children together. How many children? Separate the children that swim. How many children float?

_____ + ____ **-** _____

Directions: Have students use linking cubes to model the situations. Then have them write the equations.

Lesson 30 Exit Ticket

1. There are 17 fish. 5 are small. 12 are big.

_____ and _____ are the parts.

_____ is the whole.

Separate the big fish. How many small fish? _____

Put together the big and small fish. How many fish? _____

2. There are 14 fish. There are 6 red fish. There are 8 yellow fish.

Put together the red fish and yellow fish. How many fish?

Separate the yellow fish. How many red fish?

_____+ ____ = _____

Put together the yellow fish and red fish. How many fish?

_____+ ____ = _____

Separate the red fish. How many yellow fish?

_____ = _____

_____ - ___ =

Directions: 1) Have students use linking cubes to model the situations and write the answers.2) Have students use linking cubes to model the situations and write the equations.

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Extra Practice: Bird Stories

1. There are 17 birds.

9 blue birds. Color the blue part.

8 red birds. Color the red part.

Circle the whole group.



2. There are _____ birds.

6 green birds. Color the green part.

9 yellow birds. Color the yellow part.

Circle the whole group.



Directions: Have students model the story with linking cubes. Then have them use two different colors to color the birds to represent the parts in the story. Then have students circle the birds that represent the whole group.

Cattail Corner

1. Tre finds 8 frogs.

Hank finds 7 frogs.

They find 15 frogs in all.

How many frogs did Tre and Hank find all together?



Tre's Frogs Hank's Frogs



2. Sahil finds 13 leaves. 13 is a whole / part.

9 leaves are red. 9 is a whole / part.

4 leaves are green. 4 is a whole / part.

How many leaves are green?

Directions: 1) Have students complete the tape diagram and write an addition equation to represent the situation. **2)** Have students complete the number bond, circle to identify the whole and the parts, and write a subtraction equation to represent the situation.

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Wetland Finds



Directions: 1) Have students complete the tape diagram and write equations to represent the situations. **2)** Have students complete the number bond and write equations to represent the situations.

Lesson 31 Exit Ticket

1. Joi draws 18 frogs. 18 is a whole / part.

7 are green. 7 is a whole / part.

11 are brown. 11 is a whole / part.



Put the frogs together.	Joi gives the green frogs to Kent.
How many frogs in all?	How many frogs did Joi keep?
+ =	– =

Fred finds 6 purple plants.He finds 9 green plants.He finds 15 plants in all.

All Plants			

Purple Plants Green Plants

Put the plants together.	Fred puts the green plants in a pot.
How many plants in all?	How many plants are not in a pot?
+ =	=

Directions: 1) Have students complete the number bond, circle to identify the whole and the parts, and write equations to represent the situations. **2)** Have students complete the tape diagram and write equations to represent the situations.

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Extra Practice: Match Ups











Directions: Have students color the whole in the tape diagrams and number bonds orange, and the parts red and yellow. Then have them draw lines to match the equations to the models.

Part-Part-Whole Tape Diagrams









Part-Part-Whole Tape Diagrams







Number Bonds



Number Bonds



Party Punch

1.	There are 11 cups. 7 are red. The rest are blue. How many cups are blue?	7 + = 11 11 - 7 = is the whole. and are the parts.
2.	There are some plates. 5 are small. 8 are big. How many plates in all?	5 + 8 = is the whole. and are the parts.
3.	There are 18 napkins. Some are blue. 6 are green. How many blue napkins?	+ 6 = 18 18 = 6 is the whole. and are the parts.
4.	There are 12 bowls. 9 are full. The rest are empty. How many empty bowls?	9 + = 12 12 - 9 = is the whole. and are the parts.

Directions: Have students use linking cubes to solve the problems. Then have them complete the equations and identify the whole and parts.

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Party Games

 Some children hide. 6 children hide inside and 6 hide outside. How many children hide?

Equation: 6+6=12 12 children hide.

2. Lena has 10 balls. 7 balls are yellow and the rest are purple. How many balls are purple?

Equation: _____ purple balls

3. Marisol and Lena jump rope. Marisol does 11 jumps and Lena does 5 jumps. How many jumps do the girls do?

Equation: _____ jumps

4. There are 13 children playing tag. 8 of the children are girls and the rest are boys. How many boys are playing tag?

Equation: _____ boys

 Billy finds things on a scavenger hunt. He finds 9 leaves and 6 twigs. How many things did he find?

Equation: ______ things

Directions: Have students use manipulatives to solve the problems. Then have them write equations to represent the problems and write the solution.

Lesson 32 Exit Ticket

1. Jack has 14 balloons. $6 + ___ = 14$ Some are large. $14 - 6 = __$ 6 are small. $14 - 6 = __$ How many large______ is the whole.balloons?______ and ______ are the parts.

2. Jan picks 17 flowers. Some are pink and 7 are yellow. How many flowers are pink?

Equation:	pink flowers

3. Fred eats some grapes. 9 are red and 6 are green. How many grapes does Fred eat?

Equation:	Fred eats	grapes.
	· · · · · · · · · · · · · · · · · · ·	

Directions: Students will use manipulatives to solve the problems. **1)** Have students complete the equations and identify the whole and parts. **2–3)** Have students write equations to represent the problems and write the solutions.

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Extra Practice: Linking Cube Problems

1. You have 14 flowers. 11 are green and the rest are blue. How many flowers are blue?

Equation: blue flo	wers
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2. A shop has some sneakers. 9 are red and 4 are blue. How many sneakers in all?

Equation:	sneakers in all
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3. There are 17 cats. Some are gray, and 9 are black. How many cats are gray?

Equation: _____ gray cats

4. The park has some slides. 2 slides are pink and 12 are brown. How many slides in all?

5. 16 birds play in the water. Some of the birds are blue, but 6 are yellow. How many birds are blue?

Equation:			blue birds
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Directions: Have students use linking cubes to solve the problems. Then have them write equations to represent the problems.

Food Bank

 Aiko has some carrots. How many carrots does she have if 6 are small and 7 are big?



Small Carrots

Big Carrots

2. Leo puts 10 green apples in the bag. Then he puts 8 yellow apples in the bag. How many apples are in the bag?

+ =



_____+ ____ = _____

3. If 6 boxes are full and 9 are empty, how many boxes are there in all?



_____ + _____ = _____

Directions: Have students draw dots or write numbers to complete the tape diagrams. Then, have students write an addition equation to represent the problem.

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Food Donations

 Gio brings 8 cans of soup.
 Ely brings 8 cans.
 How many cans did they bring in all?

Equation:	8+8=16
-	



Gio's Cans

Ely's Cans

- 2.
 3 peppers are red.
 Peppers

 9 are green.
 How many peppers are there?
 Image: Comparison of the sector of the secto
- 3. There are some oranges.
 6 are in a box.
 8 are in a bag.
 How many oranges are there?
 Equation: __________

Directions: Have students complete the tape diagrams to represent the problems. Then, have students write equations to represent the problems.

Lesson 33 Exit Ticket

- 2. lan has 11 red onions. Then he finds 9 yellow onions. How many onions does lan have?

Equation:

- Onions
 Onions
 Red Yellow
- 3. Tina has a tomato plant. She picked 5 red tomatoes. She left 12 green tomatoes on the plant. How many tomatoes were on the plant to start?



Equation: _____

Directions: Have students complete the tape diagrams and write equations to represent the problems.

Extra Practice: On the Bus

1. 8 children and 4 parents are at the bus stop. How many people are there in all?



2. Some people ride on the bus.12 people get off the bus.4 people are still on the bus.How many people were on the bus to start?



3. Some buses are parked.
8 buses leave the parking lot.
12 buses stay. How many buses were parked in the lot to start?



Directions: Have students cut out the tape diagrams on the following page. Then they use the numbers in the problem to find the matching tape diagram, complete it, and glue it next to its matching problem. Finally, students write the equation to show the addition.

On the Bus Tape Diagrams



Part-Part-Whole Tape Diagrams





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Part-Part-Whole Tape Diagrams



1





Origami Oops!

 Amal's origami planes fly well. But 5 get stuck in a tree! Amal made 13 planes. How many are not stuck in a tree?



2. Amal had 15 paper cranes. He spilled paint on 8 of them. How many cranes do not have paint on them?

3. Amal makes paper boxes. He lost the lids for some.
11 boxes still have lids. If Amal has 14 boxes in all, how many boxes lost their lids?





Directions: 1–2) Have students complete the tape diagram and write a missing addend and a subtraction equation to represent the problem. **3)** Have students complete the number bond and write a missing addend and a subtraction equation to represent the problem.

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Origami Projects

 Sami has small and big paper squares. 7 squares are small. She has 16 squares in all.

How many squares are big?





 Sami made 12 origami animals. 9 are turtles. The rest are birds. How many birds did Sami make?



Sami made _____ birds.

3. Sami makes 18 flowers. Some are blue. 10 flowers are red. How many flowers are blue?





Directions: 1–2) Have students complete the tape diagrams and write equations to represent the problems. **3)** Have students complete the number bond and write equations to represent the problem.

Lesson 34 Exit Ticket

1. Dean has 11 soccer balls. 7 are big and the rest are small. How many soccer balls are small?

+ ? =	
=	
balls are small.	

2. Rae finds 17 coins. Some are pennies, but 11 are dimes. How many coins are pennies?

+ ? =	
=	
coins are pennies.	

3. Maya has 13 grapes. 9 are green and the rest are red. How many grapes are red?





Directions: Have students complete the tape diagrams and number bond and write equations to represent the problems.

Extra Practice: Can You Match It?



Directions: Students draw lines to match a tape diagram model to each problem. Then they solve the problem and write equations to represent the problem.

Missing Parts Number Bonds



Part-Part-Whole Tape Diagrams









Number Bonds



Speedy Cup Stacking

1. Rafael has 7 cups. He gets 8 more.

Now there are 15 cups. _____ and _____ are the parts. _____ is the whole.

2. Rafael has 11 cups. He finds 8 more.

Now he has 19 cups. _____ and _____ are the parts.

_____ is the whole.

3. Rafael has 12 cups. He gives 3 away. There are 9 cups left.

_____ and _____ are the parts. _____ is the whole.

4. Rafael has 13 cups. He crushes 4. There are 9 cups left.

_____ and _____ are the parts. _____ is the whole.

5. Rafael has 14 cups. He loses 8. There are 6 cups left.

_____ and _____ are the parts. _____ is the whole.

Directions: Have students use cups to act out the problems. Then have them write the parts and the whole in each problem.

Cup-Stacking Competition

1. Mina stacks 11 cups. Then she stacks 2 more. She stacks 13 cups in all.

Equation: ______1 + 2 = 13

2. Cam stacks 16 cups, but 5 cups fall. Now there are 11 cups left.

3. Pete has 12 cups. Then he gives 8 to Mina. Now Pete has 4 cups.

Equation:	

4. Kip gives Viv 3 cups. Now Viv has 20 cups all together. She started with 17 cups.

Equation:	

 Akriti knocks 9 cups off the table. She started with 16 cups. Now there are 7 cups left.

Equation:	
•	

Directions: Have students use cups to act out the problems. Then have them write the equations.

Lesson 35 Exit Ticket

 Dom stacked 18 cups. Then he gave 9 cups to Adam. Dom has 9 cups left.

_____ and _____ are the parts.

_____ is the whole.

There are 8 cups stacked on the table. Then Finn stacks
 7 more cups. Now there are 15 cups on the table.

Equation:	
•	

3. Teddy has 13 cups in all. He started with only 7 cups. Then Sarah gave him 6 more.

Equation: _____

 Maddy stacked 13 cups on the table. The wind knocked over 5 cups, so now only 8 cups are stacked.

Equation: _____

Directions: Have students use cups to act out the problems. **1)** Have students write the parts and the whole. **2–4)** Have students write the equations.

Catapult Learning"

Extra Practice: Silly Problems

	apples	elephants	clowns	cows	beans
1.	9 There are 1 Equation:	jump r 7	rope. 8 more in all.	e join them).
2.	The songs. They Equation:	sing / sing 14 songs	g 5 songs. Th s all togethe	nen they si r.	ng 9 more
3.	16 Equation:	hop.	12 hop away	/. 4 are lef	t.
4.	11 9 Equation: _	sit or are lef	n a fence. 2 l [:] t.	eave.	
5.	Jon picks 1 He gives 7 Equation: _	2 to his teacher.	on his v He has 5	walk to scł	nool. left.

Directions: Have students use the word bank to complete the story problems. Then have students use counters to act out the problems and write the equations.

Lucky Licorice



7 is a part / whole.

Licorice has 13 friends. 13 is a part / whole

Directions: 1) Have students draw dots to record the whole and parts in the tape diagram to model the problem. **2–3)** Have students identify the whole and parts and record them in the number bond to represent the problems.

Catapult Learning"

Dog Treats

Licorice gets 8 treats, then he gets 8 more. Licorice has 16 treats. Licorice has 16 treats. He eats 8 treats and has 8 treats left.

Equation: $8 + 8$.== 6	Equation:	6-8=8
	All Licori	ce's Treats	
		0000	
	00000	00000	
	First Treats	More Treats	-
Lela has 10 treats. 4 more treats. Now 14 treats.	She gets v she has	Lela has 14 tr to Licorice, so	reats. She gives 4 o 10 treats are left.
Equation:		Equation:	
Licorice loves treats. He eats 8, but he had 15. Now he has 7 treats left.		Lela gives Lic Later she give so he has 15	corice 8 treats. es him 7 more, treats in all.
Equation:		Equation:	

Directions: Have students draw dots to record the whole and parts in a tape diagram to model the problems. Then have them write the equations.

Lesson 36 Exit Ticket

1. Lela has 8 books. 8 is a part / whole.

She gets 9 books from the library. 9 is a part / whole.

Lela has 17 books in all. 17 is a part / whole.



2.	Lela draws 9 pictures on Sunday and 4 pictures on Monday. So, Lela draws 13 pictures in all.	Lela has 13 pictures. She gives 4 pictures to Ben. Now Lela has 9 pictures left.
	Equation:	Equation:



Directions: 1) Have students identify the whole and parts and record them in the number bond to represent the problem. **2)** Have students draw dots to record the whole and parts in the tape diagram to model the problem.

Catapult Learning"

Extra Practice: Match Ups

Darren sees 14 birds. 10 birds fly away. 4 birds are left.

Darren has 4 stickers. He buys 14 more stickers. Darren has 18 stickers in all.

Darren had 18 crayons to start. He broke 10 crayons. Darren has 8 crayons left.

Darren has 8 pens. He buys 4 more pens. Now Darren has 12 pens.





14



Number Bonds



Number Bonds



Part-Part-Whole Tape Diagrams









Part-Part-Whole Tape Diagrams









County Fair

Aida has 14 tokens.
 She spends 6 tokens on some popcorn.
 How many tokens does she have left?

14 - 6 = ____ 6 + ____ = 14

She has _____ tokens left.

Aida spends some tokens.
She spends 3 tokens to buy cotton candy.
Now she has 9 tokens left.
How many tokens did Aida have at the start?

3 + 9 = _____ - 3 = 9

She started with _____ tokens.

3. Bo has 7 tokens.

Aida gives him 11 tokens. How many tokens does Bo have now?

7 + 11 = _____

Bo has	 tokens.
Ro has	tokens
	 tokono.

Directions: Have students use manipulatives to model the problems. Have them identify the whole and the parts, identify the unknown with a question mark, and complete the equations.

Whole:	
Part:	
Part:	

Whole:	
Part:	
Part:	

Whole:	-
Part:	
Part:	

Fair Rides

1. There are 6 children in the fun house. Then 6 more children enter. How many children are in the fun house now?

Equation: 6+6=12 12 children are inside.

- There are 11 children in line. Some children leave.
 Only 8 children are still in line. How many children leave?
 Equation: ______ children leave.
- 3. Some children get off the roller coaster, but 12 stay on. There were 18 children on the roller coaster at the start. How many children get off?

Equation:			children get off.
-----------	--	--	-------------------

4. Some children ride the Ferris wheel. 8 children get on. Then 9 more children get on. How many children ride the Ferris wheel?

Equation:	children ride the
•	

Ferris wheel.

Directions: Have students use manipulatives to solve the problems. Then have them write equations to represent the problems.

Lesson 37 Exit Ticket

Mia has 17 balloons.
Some pop!
6 are left.
How many balloons popped?

Whole:
Part:
Part:

Equation: _____

_____ balloons popped.

 Leah picks 15 prizes. She gives away 6 and keeps the rest. How many prizes does Leah keep?

Equation: _____

Leah keeps _____ prizes.

3. Some boxes of popcorn are for sale. Marly sells 9 boxes. There are 3 boxes left. How many boxes were there at the start?

Equation: _____

There were _____ boxes of popcorn.

Directions: Have students use manipulatives to model the problems. **1)** Have students identify the whole and the parts, identify the unknown with a question mark, and write the equation. **2–3)** Have students write equations to represent the problems.

Catapult Learning"

Extra Practice: Take and Put Problems

Take 19 cubes.
 Put back 13 cubes.
 How many cubes are left?

_____ cubes are left.

______ = _____ =

Take 16 cubes.Put 9 cubes back.How many cubes are left?

Take 8 cubes.Now take 5 more cubes.How many cubes do you have?

I have _____ cubes.

+ _ _ = ____

Take 14 cubes.Put 7 cubes back.How many cubes are left?

- ____ = _____

cubes are left.

cubes are left.

______ = _____ =

- 5. Take 4 cubes.Now take 9 more cubes.How many cubes do you have?
- 6. Take 15 cubes.
 Now take 2 more cubes.
 How many cubes do you have?

_____+ ____ = _____

I have _____ cubes.

I have _____ cubes.

_____ + _____ = _____

Directions: Have students use linking cubes to solve the problems. Then have them write equations to represent the problems.

Catapult Learning"

Guitar Practice



Ivy plays 7 songs at the concert. There is a break. Then she plays 8 more songs. How many songs does Ivy play?

_____ + _____ = _____

3. Mei has 3 music books.
Then she gets 9 more music books from the library. How many music books does she have in all?
+ ____ = ____



Ivy's Songs

More

Songs

First

Songs

Concert Practice

 Ms. Drew has some kazoos. She gives Ying 2 kazoos. Now Ms. Drew has 10. How many kazoos did Ms. Drew have at the start?

Addition Equation:

2 + 10 = 12

2. There are 5 people singing.Then 9 more people join them.How many people are singing now?

Addition Equation:

3. There are 8 drummers standing in a row. Then 9 more drummers come. Now how many drummers are there?





Singers

More Singers



Addition Equation:

Directions: Have students write numbers to complete the tape diagram or number bond and write addition equations to represent the problems.

Lesson 38 Exit Ticket

Gil sees some bunnies. He sees
 6 bunnies playing in the yard.
 Then 7 more join them. How
 many bunnies does Gil see?

Addition Equation:

Kai has some crackers.
He gives 5 to his sister, Leah.
Now he has 11 crackers left.
How many crackers did Kai have at the start?

Addition Equation:





Leah's Crackers Lo Crackers



Addition Equation: _____

Directions: Have students write numbers to complete the tape diagrams and number bond and write addition equations to represent the problems.

Extra Practice: Riddle Time

9 buses are lined up. Then 9 more buses line up. How many buses are lined up?



Some children ride the bus. 7 get off at the first stop. 4 stay on the bus. How many children rode the bus at the start?

Some people ride the bus.12 are on the bus. 5 more get on the bus. How many people ride the bus?

_____+ ____ = _____

+ =



Buses

Leah's Crackers

Buses

Crackers Left

More Buses

How do bees travel?



Ζ

B

Directions: Have students write numbers to complete the models and write addition equations to represent the problems. Then have students write the letter that corresponds to each sum to answer the riddle.

Part-Part-Whole Tape Diagrams





Number Bonds



School Fundraiser

1. Jess has 19 posters to hang. **19 Posters** She hangs some of them. She has 11 left to hang. How 11 many posters did she hang? Left to Hang Already Hung + = She hung _____ posters. - = **12 Posters** Jack needs 12 posters. 2. He makes 8. How many more does he need? **Posters Left to** Posters + = Made Make He needs _____ posters. - = 3. Some of Jon's crayons break! He had 16 crayons. 9 crayons are left. How many crayons broke? _____+ ____ = _____ crayons broke. =

Directions: 1–2) Have students draw dots and write numbers to complete the tape diagram. Then have them write equations to represent the problem and record the solution. **3)** Have students model the problem with the number bond, complete the equations, and write the solution.

Catapult Learning"

Student Car Wash

1.	There are 11 cars to wash.	Cars	
	Sasha washes 6. How many more cars to wash?	A XXXXX XO	
	Addition: $6+5=11$ Subtraction: $11-6=5$	Cars Washed	Cars Left
2.	There are 13 students washing cars. Some students go home. 4 students are left. How many		Students
	students went home? Addition:	Students Go Home	Students Left
	Subtraction:	students v	vent home.
3.	 In the morning, 9 cars get washed. There were 15 cars in I How many cars are still in line? 		15 cars in line.
	Subtraction:		
	cars are still in line.		

Directions: 1–2) Have students draw dots and write numbers to complete the tape diagram. Then ask them to write an addition equation and a subtraction equation to represent the problem and write the solution. **3)** Have students model the problem with the number bond, write an addition and subtraction equation, and write the solution.

Lesson 39 Exit Ticket

1.	Hugo has 17 sponges. He gives	\$	Sponges
	8 to friends. How many sponges does he have now?		
	Addition:	Sponges Given	Sponges Left
	Subtraction:		sponges
2.	Mina uses 12 towels. She started with 18 towels. How many towels does she have left?		Towels
	Addition:	Used Towels	Towels Left
	Subtraction:		towels
3.	Chloe had 19 cars to wax. She wa some of them. Now 9 cars are lef wax. How many cars did she wax	xes t to ?	

Directions: 1–2) Have students draw dots and write numbers to complete the tape diagram. Then have them write equations to represent the problem and record the solution. **3)** Have students model the problem with the number bond, write an addition and subtraction equation, and write the solution.

Catapult Learning"

Extra Practice: Build a Tape Diagram

		8 carrots left
Equation:		
		7 carrots left
Equation:		
		11 carrots left
Equation		

Directions: Have students cut out the cards on the following page. Students glue the sentences in the appropriate place on each tape diagram above. Then, have students complete the equations on the cards and glue them below the tape diagram they represent.

Build a Tape Diagram Cards

<u>~</u>				
	16 carrots o	on the table.		
F — — 				
	14 carrots on the plate.			
F — — L	Pumpkin eats 3.			
	Pumpkin eats 8.	13-6= 		
	14 – 3 =	16 – 8 =		

Part-Part-Whole Tape Diagrams







Number Bonds



Coat Drive

1. There are some coats in the bin. Jen brought 4 of them. Bob brought 5. Simone brought 9. How many coats are in the bin?

_____+ ____ = _____ coats

2. In the bin, there are 4 blue coats, 5 red coats, and 3 gray coats. How many coats are there in all?

_____ + ____ + ____ = ____ coats

3. Suri asks friends to donate coats. Jan gives her 6 coats. Ben gives her 5 more. Lin gives her 7. How many coats did the friends give her?

_____+ ____ + ____ = _____ coats

4. There are 8 blue coats, 4 purple coats, and 3 green coats. How many coats are there in all?

_____+ ____ + _____ = _____ coats

Directions: Have students draw dots and write numbers to complete a tape diagram to model the problem. Then have them add to find the sum and complete the equations.

Mittens and Hats

Mr. Romero's class collects
6 mittens on Monday. On
Tuesday, they collect 6 more. On
Wednesday, they collect
6 more. How many mittens did
they collect in all?



 Sophie knits 5 hats. Then she knits 6 more. Then Eric gives her 3 hats. How many hats does Sophie have to donate in all?

Equation: _____ hats

3. David puts 8 hats in the box. Grace puts 5 more in the box. Ben adds 6. How many hats are in the box?

Equation: _____ hats

4. Mika donates 6 polka dot mittens, 7 striped mittens, and 3 plain mittens. How many mittens did Mika donate?

Equation: _____ mittens

Directions: Have students complete a number bond, then add to find the sum and write the equations.

Lesson 40 Exit Ticket

1. There are 7 red coats, 8 blue coats, and 5 black coats. How many coats are there all together?

Equation: _____ coats

- 2. There are 5 hats in a box. Hal puts 8 more in the box.
 Aisha puts 4 in the box. How many hats are in the box now?
 Equation: ______ hats
- **3.** Jack collects 2 black mittens, 6 green mittens, and 8 blue mittens. How many mittens does he collect?

Equation:	 mittens

There are 4 coats in the bin. Ami puts 2 coats in the bin and Jin puts in 8 more coats. How many coats are in the bin?
 Equation: ______ coats

Directions: Have students model and solve the problems with a tape diagram or number bond. Then have students write an addition equation.

Extra Practice: Three Rolls

 There are _____ cars in the lot. Then _____ more cars drive into the lot. And _____ more cars park in the lot. How many cars are in the lot now?

_____ + ____ + ____ = ____ cars

2. Birds are sitting in a tree. There are _____ brown birds, _____ blue birds, and _____ yellow birds. How many birds are there in all?

_____ + ____ + ____ = ____ birds

Alicia picks some flowers. She picks _____ tulips, _____ roses, and _____ daisies. How many flowers does Alicia pick?

_____+ ____ = _____ flowers

4. There are _____ dogs in the dog park. Simon brings _____ more dogs. Then _____ more dogs come. How many dogs are in the dog park now?

_____+ ____ + _____ = _____ dogs

Directions: Students roll a die three times to generate the numbers for each problem. Students then use a tape diagram or number bond to model and solve the problem. Then they write an addition equation to represent the problem.













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Assessment

Unit 4 Assessment



2. Ian has 7 star stickers. He has
13 car stickers. How many
stickers does he have all
together?



Star Stickers Car Stickers

Equation:	stickers

Carli has 14 flowers. Some are yellow.10 flowers are red. How many flowers are yellow?

+ =



_____yellow flowers

 4. Leo picks 6 apples in the morning. He picks 7 more apples in the afternoon. Leo picks 13 apples in all.
 All Apples

 Morning Afternoon Apples
 Afternoon Apples

Add the afternoon apples	Take away the afternoon
to the morning apples.	apples. How many morning
How many apples in all?	apples are there?
+ =	= =

There are some chickens in the barn. 5. The farmer puts 9 chickens outside. He leaves 6 in the barn. How many chickens were in the barn at the start?



chickens

Equation: _____

Fish There are 18 fish in a coral reef. **6**. 9 swim away. How many fish are left? + = Fish Swim **Fish Left** Away

fish left

_____ =

7. There are 5 blue cups, 7 red cups, and 4 white cups. How many cups in all?





Unit 4 Cumulative Review

1. Subtract.

80 - 30 = _____

2. Add.

4 + 7 + 6 = _____



3. Compare the numbers.

4. Count on to add.

11 + 1 = _____

←

38 + 30 = _____

≻

⇒

6. Color 13.



7. Carina has some markers. 5 are blue. 7 are yellow. How many markers in all?

Equation:	markers

8. Count.



How	many?	

9. There are 16 boats. 5 boats sail away. How many boats are left?

Equation: _____

_____ boats



10. Show 35 in the place value chart.

Tens	Ones