

Number Stories

In Unit 3, children continue learning about number stories. In Unit 2, they solved stories based on change situations in which starting quantities get larger or smaller. In Unit 3, they learn to model and solve parts-and-total situations in which two quantities are combined to make larger quantities. They use parts-and-total diagrams to organize the information about these situations and write number models to describe them.

Total	
17	
Part	Part
9	8

Janis had 9 blue fish and 8 red fish.

How many fish does Janis have in all?

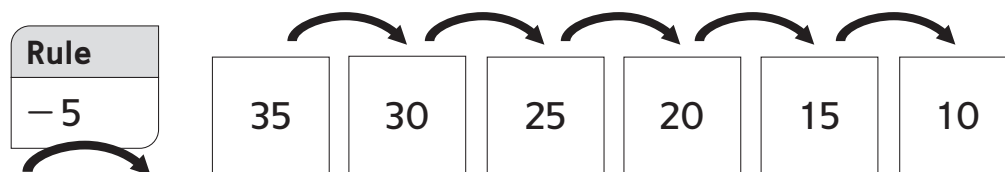
$$9 + 8 = 17$$

Children also explore the relationship between counting and addition and subtraction. They practice counting up and back on number lines to add and subtract, investigate patterns in number lines and number grids that will help them count more efficiently, and do activities with calculators and Frames-and-Arrows diagrams to help them connect counting patterns to addition and subtraction.

Vocabulary

Important terms in Unit 3:

Frames and Arrows A diagram consisting of frames connected by arrows used to represent number sequences. Each frame contains one number, and each arrow represents a rule that determines what number goes in the next frame.



The Family Note on Home Link 3-9, which you will receive later, provides a more detailed description of Frames and Arrows.

Parts-and-Total Diagram A diagram used to model problems in which two or more quantities (parts) are combined to get a total quantity.

Total	
<i>13</i>	
Part	Part
<i>8</i>	<i>5</i>

Do-Anytime Activities

To work with your child on concepts taught in this and previous units, try these activities:

1. Count by 1s, 5s, or 10s aloud with your child. For a challenge, try starting at different numbers. "Count up by 10s starting at 3: 3, 13, 23, 33 ..."
2. Have your child tell you a number story for a given number sentence, such as $3 + 5 = 8$. For example, "I had 3 dogs. Then I got 5 more dogs. Now I have 8 dogs."
3. Using the number grid, select a number and have your child point to a number that is 1 more or 1 less than the selected number. Or do problems like this: "Start at 28. Count back (or up) 5 spaces. On which number did you land?"

-9	-8	-7	-6	-5	-4	-3	-2	-1	0
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

Building Skills through Games

Your child will play these games and others in Unit 3:

Domino Top-It

Children compare total numbers of dots on dominoes in this variation of *Top-It*.

Subtraction Bingo

Bingo cards have a number in each space. Players take turns flipping over two number cards and calling out the difference. They mark the differences on their cards until one player covers 4 spaces in a row.

As You Help Your Child with Homework

As your child brings home assignments, you may want to go over the instructions together, clarifying them as necessary. The selected answers listed below will help guide you through the Home Links for this unit.

Home Link 3-1

- 8
- 2
- 45, 46, 47, 48

Home Link 3-2

- 4; 3
- Sample answer: Mark had 4 blue ribbons. He won 3 more blue ribbons. Now he has 7 blue ribbons.
- 16
- 20
- 35

Home Link 3-3

- Answers vary.
- Answers vary.
- 5; 5; Yes

Home Link 3-4

- Pictures vary but should show 5 fish and 3 cats.
8; Sample answer: $5 + 3 = 8$
- 7

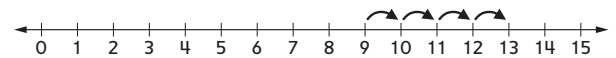
Home Link 3-5

- 10, 20
- 5, 10, 15, 20
- 2, 4, 6, 8
- 1, 2, 3, 4
- Sample answer: When you count by 5s, you land on all the count-by-10 numbers plus some more numbers.
- 10
- 8

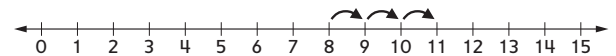
Home Link 3-6

Sample answers shown for Problems 1–3.

- 13



- 11



- 7



- 18

Home Link 3-7

- | | |
|-------|--|
| 1. 5 | 5. 7 |
| 2. 15 | 6. 4 |
| 3. 9 | 7. 20 |
| 4. 6 | 8. <i> </i> <i> </i> <i> </i> <i> </i> |

Home Link 3-8

1.

									0
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

2. 10; 5
3. 24
4. 31
5. 39
6. 46

Home Link 3-9

1. 7; 11; 15
2. 17; 14; 13
3. 15; 20; 25
4. 9; 8; 4; 3

Home Link 3-10

1. Sample answers: add 2; + 2; count up by 2s
2. Sample answers: add 5; + 5; count up by 5s
3. Sample answers: subtract 3; - 3; count back by 3s
4. Answers vary.

Home Link 3-11

1. 3, 6, 9, 12, 15, 18, 21
2. 20, 18, 16, 14, 12, 10, 8
3. 45, 40, 35, 30, 25, 20, 15
4. $9 + 9 = 18$; $7 + 3 = 10$