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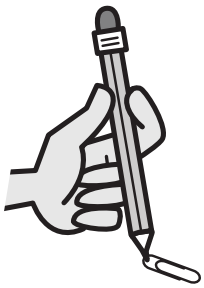
These Beans Have Got To Go! page 1 of 4

Note to Families

Winning is not just a matter of luck in this game where players take turns spinning and adding. Certain sums are going to come up more often than others. It is easier to spin a total of 7 than a total of 2, for instance, simply because there are more combinations for 7 on the spinners. You can get a 7 by spinning 1 + 6 or 2 + 5 or 3 + 4. The only way to get a 2 is by spinning 1 + 1. Your child will probably want to place a bean on every number "just to be safe," but will learn through experience that the middle numbers usually come up more often. The second part of the assignment will help them find out why.

Materials

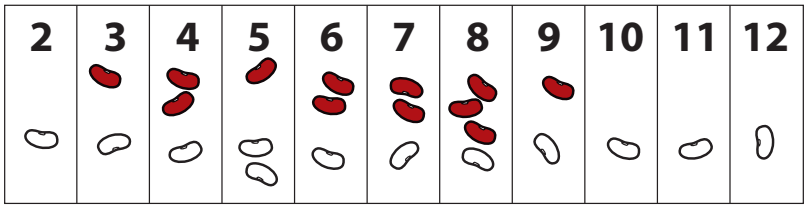
- These Beans Have Got To Go! pages 1–4
- 24 game pieces, 12 each in 2 different colors (e.g., 12 lima and 12 pinto beans, 12 red and 12 white buttons, 12 pennies and 12 dimes, 12 red and 12 yellow Legos)
- paperclip and pencil for spinner
- crayons or colored pencils



Instructions

1 Each player should place his or her beans on the game board (page 2).

Note You can place more than 1 bean on a particular number.



2 Players take turns spinning two numbers, adding them, and removing a game piece.

- The first player spins both spinners and adds the two numbers.
- If the player has any beans on that total, she can remove one bean from that section of the board. Her turn is over.
- If there are no beans on that total, the player's turn is over.

3 Continue playing until one player moves all the beans from his or her board. This player is the winner.

4 Play the game several times and talk about ideas that would help someone win. (Hint: You might want to do pages 3 and 4 of this assignment first.)

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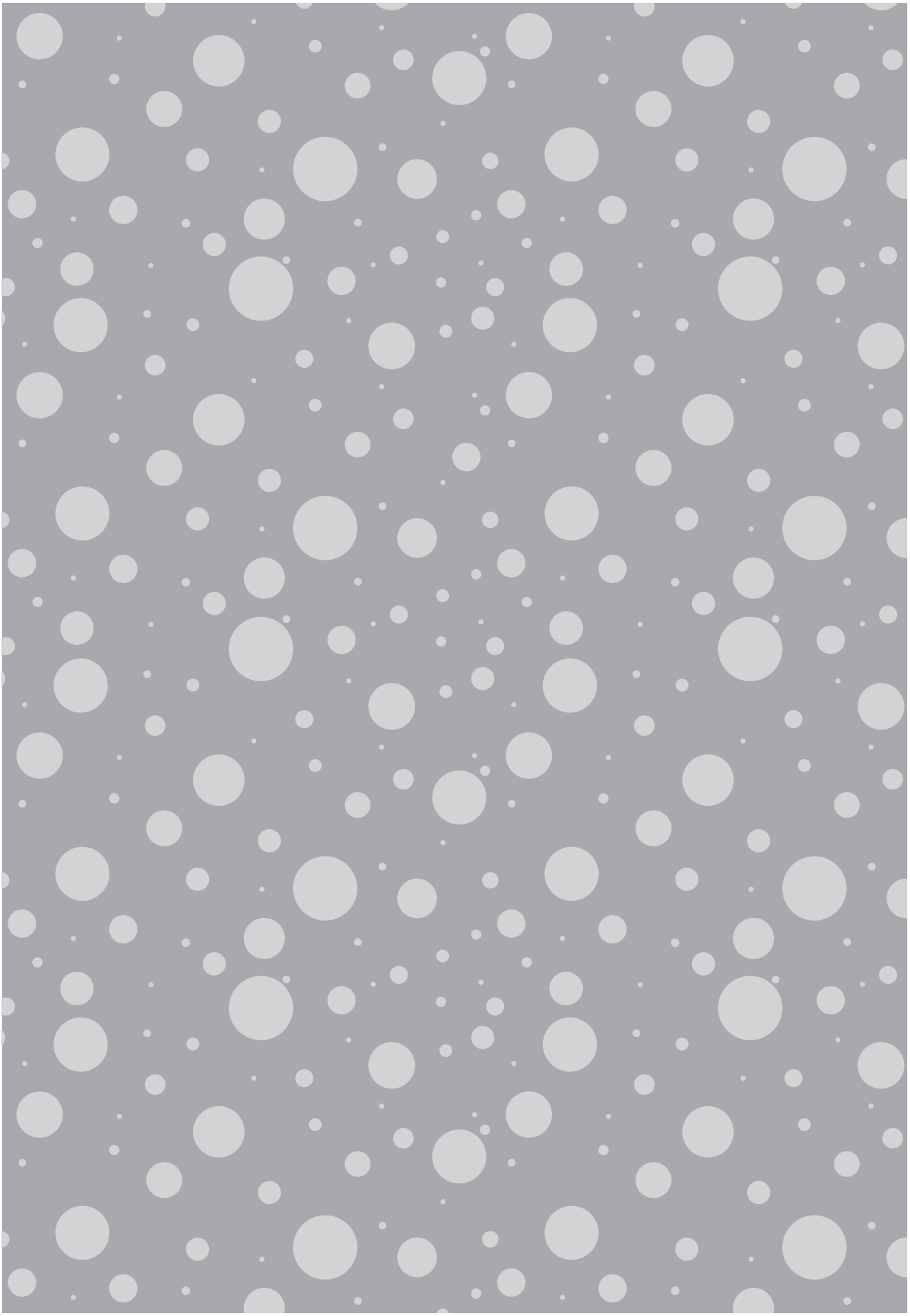

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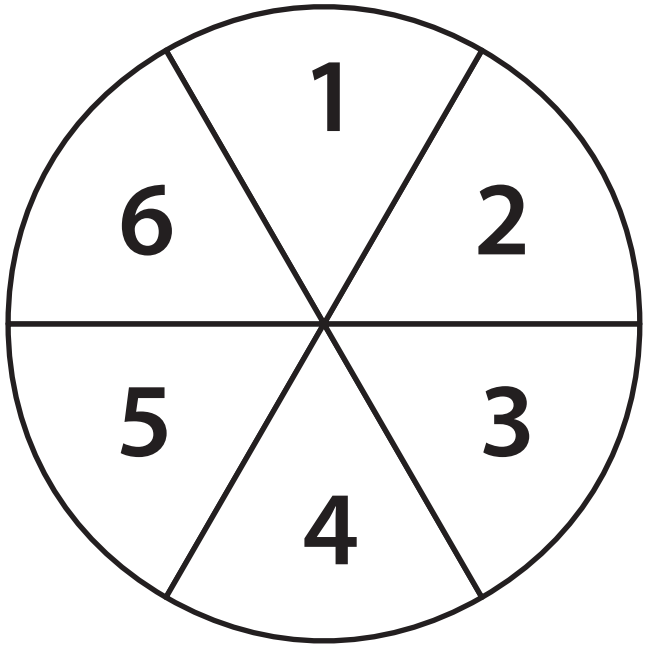
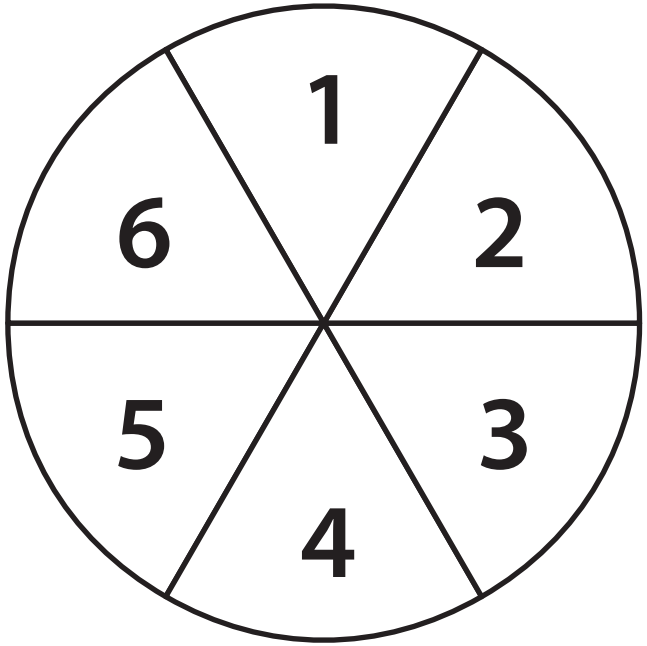
These Beans Have Got To Go! page 2 of 4



+



2	3	4	5	6	7	8	9	10	11	12

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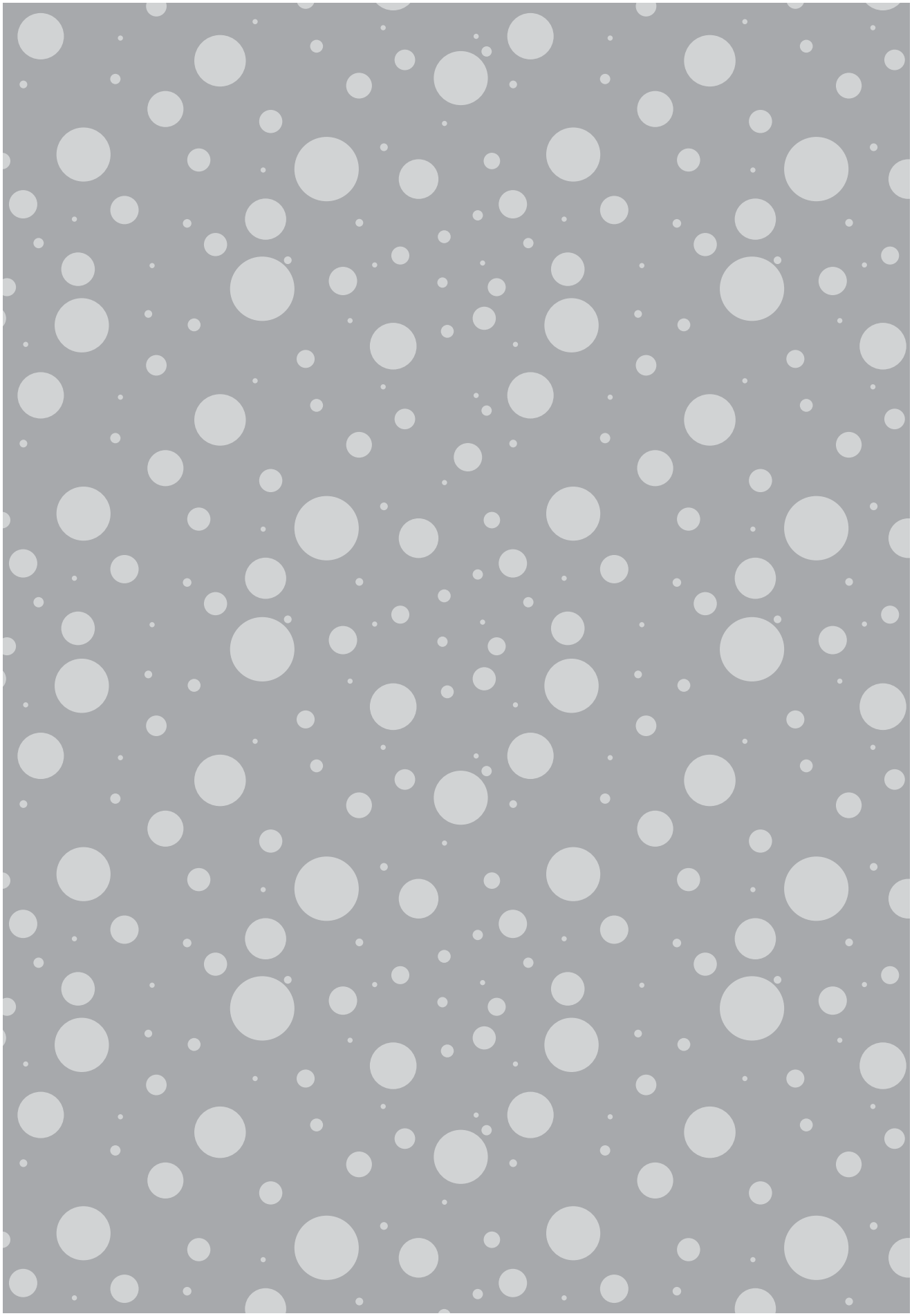

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These Beans Have Got To Go! page 3 of 4

Are you wondering why the middle numbers keep winning on the the game you just played? Fill in the sums on the addition table shown below and follow the instructions for coloring them in—you might begin to see why it's a better idea to put your beans on the 6 and the 7 instead of the 2 and the 12.

1 Fill in the sums on the addition table below.

2 Color in the table using the rules below.

- 6s red
- 7s orange
- 8s yellow

+	1	2	3	4	5	6
1	2	3				
2						
3			6			
4						
5		7				
6						

(continued on next page)

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These Beans Have Got To Go! page 4 of 4

3 Which sums came up the most often on the addition table?

4 Which came up the least often on the addition table?

5 Why do you think it worked this way?

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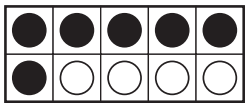
Tens, Dollars & Quarters page 1 of 2

1 Circle the two numbers in each box that add up to 10.

ex		a		b		c	
(9)	3	5	4	7	2	2	8
5	(1)	6	2	3	0	5	3

2 Write two addition equations and two subtraction equations to match each ten-frame.

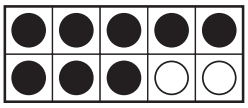
ex



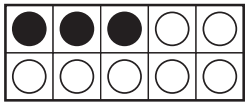
6 + 4 = 10 10 − 4 = 6

4 + 6 = 10 10 − 6 = 4

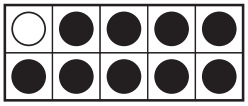
a



b



c



3 Find each difference.

10	10	10	10	10	10	10
− 7	− 5	− 6	− 3	− 4	− 9	− 2

4 Fill in the missing numbers.

3 + _____ = 10 _____ + 5 = 10 4 + 6 = _____ 9 + _____ = 10

10 = 7 + _____ 10 = 8 + _____ 6 + _____ = 10 1 + 4 + 5 = _____

(continued on next page)

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Tens, Dollars & Quarters page 2 of 2

5 Jana has 7 dollars. How many more dollars does she need to have 14 dollars in all? Show your work.

Jana needs _____ dollars.

6 **CHALLENGE** Timmy has 7 dollars. How many more quarters does he need to have 12 dollars in all? Show your work.

Timmy needs _____ more quarters.

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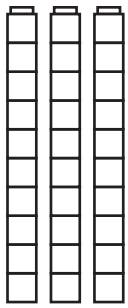
Cubes & Tens page 1 of 2

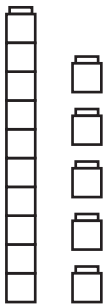
1 Write a number to show how many tens and ones are in each box below.

ex



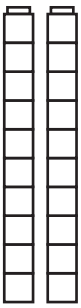
Tens	Ones
3	0

a



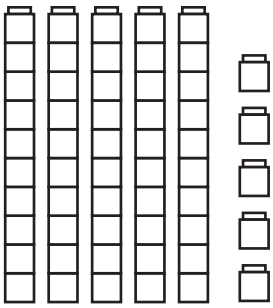
Tens	Ones

b



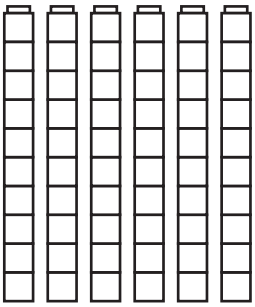
Tens	Ones

c



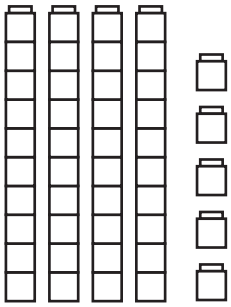
Tens	Ones

d



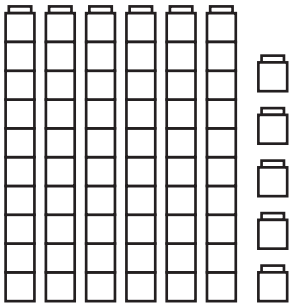
Tens	Ones

e



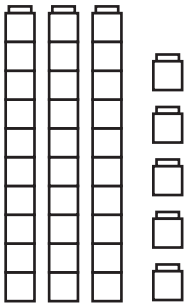
Tens	Ones

f



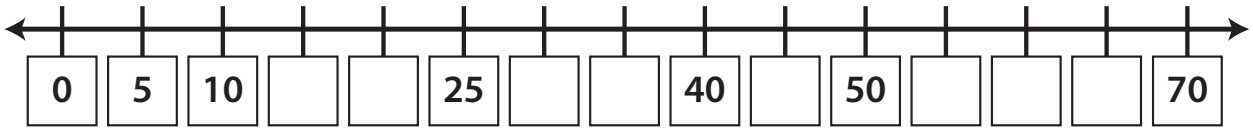
Tens	Ones

g



Tens	Ones

2 Fill in the missing numbers on the number line below.



3 Find each sum.

20	10	30	40	50	15	25
+ 10	+ 5	+ 8	+ 6	+ 10	+ 5	+ 5

(continued on next page)

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Cubes & Tens page 2 of 2

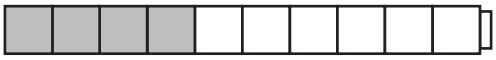
4 Write an equation to match each cube train.

ex

5 + 5 = 10

a

b



c

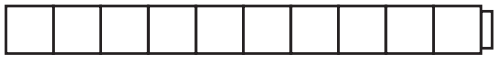
5 Color in the cube train to match the equation.

ex 6 + 4 = 10

a 8 + 2 = 10

b 3 + 7 = 10

c 1 + 2 + 3 + 4 = 10



6 Find each difference.

10 – 0 = _____ 10 – 3 = _____ 10 – 9 = _____ 10 – 2 = _____

10 – 4 = _____ 10 – 1 = _____ 10 – 5 = _____ 10 – 8 = _____

9 – 4 = _____ 10 – 6 = _____ 10 – 7 = _____ 10 – 10 = _____

7 Fill in the missing numbers.

5 + _____ = 10 _____ + 7 = 10 10 = 6 + _____ 10 = 1 + _____

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