Name _____ Date _____

CBA Multiplication and Division

Student Sheet 1

1. George has 4 cups. There are 2 cubes in each cup. How many cubes does George have altogether?

2. Greg has 5 cups. There are 3 cubes in each cup. How many cubes does Greg have altogether?

3. Marge has 5 bags of candy. There are 4 pieces of candy in each bag. How many pieces of candy does Marge have altogether? Use cubes to act out the problem.

4. Mary has 6 cubes. She puts 2 cubes in each cup. How many cups does she have?

5. Zach has 12 cubes and 3 cups. He puts the same number of cubes into each cup. How many cubes are in each cup?

6. Mimi has 15 pennies. She wants to put them into 5 equal stacks. How many pennies will be in each stack? Use cubes to act out the problem.

7. Mimi has 18 pieces of candy. She wants to put 3 pieces in each bag. How many bags does she need? Use cubes to act out the problem.

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 2

1. George has 4 cups. There are 2 cubes in each cup. How many cubes does George have?

2. A teacher is giving cubes to some of her students. The teacher has 9 cubes. She gives 3 cubes to each student. How many students get cubes?

3. Zach has 12 cubes and 3 cups. He puts the same number of cubes into each cup. How many cubes are in each cup?

4. Bubblegum costs 5 cents per piece. How much do 4 pieces cost?

5. Bubblegum costs 5 cents per piece. How many pieces can you buy with 30 cents?

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 3

1. Fred has 4 cups. There are 2 cubes in each cup. How many cubes does Fred have altogether?

2. Bubblegum costs 5 cents per piece. How much do 4 pieces cost?

3. Bubblegum costs 5 cents per piece. How many pieces can you buy with 20 cents?

4. Fay has 6 cups. There are 3 cubes in each cup. How many cubes does Fay have altogether?

5. Mary has 3 bags of candy. There are 4 pieces of candy in each bag. How many pieces of candy does Mary have altogether?

6. Serena has 6 cubes. She puts 2 cubes in each cup. How many cups does she have?

7. Zach has 15 cubes and 3 cups. He puts the same number of cubes into each cup. How many cubes are in each cup?

8. Venus has 18 pennies. She wants to put them into 6 equal stacks. How many pennies will be in each stack? Use cubes to act out the problem.

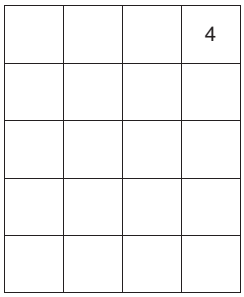
9. Venus has 18 pieces of candy. She wants to put 3 pieces in each bag. How many bags does she need? Use cubes to act out the problem.

Name _____ Date _____

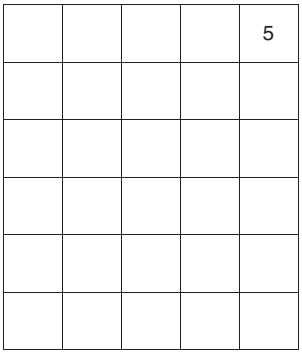
CBA Multiplication and Division

Student Sheet 4

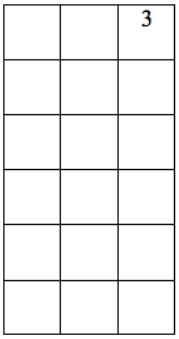
Skip-count rows of squares by fours to find out how many squares there are. Check your answer by counting by ones.



Skip-count rows of squares by fives to find out how many squares there are. Check your answer by counting by ones.



Skip-count rows of squares by threes to find out how many squares there are. Check your answer by counting by ones.



Name _____ Date _____

CBA Multiplication and Division

Student Sheet 5

Use skip-counting to solve the problems.

1. Each pack of gum has 2 pieces of gum in it.
How many pieces of gum are in 4 packs of gum?

2. Each pack of gum has 3 pieces of gum in it.
How many pieces of gum are in 7 packs of gum?

3. Each pack of gum has 5 pieces of gum in it.
How many pieces of gum are in 4 packs of gum?

4. Each pack of gum has 5 pieces of gum in it.
How many pieces of gum are in 7 packs of gum?

5. Each pack of gum has 5 pieces of gum in it.
How many pieces of gum are in 10 packs of gum?

6. Each pack of gum has 6 pieces of gum in it.
How many pieces of gum are in 4 packs of gum?

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 6

Use skip-counting to solve the problems.

1. Each pack of gum has 2 pieces of gum in it.
If there are 14 pieces of gum altogether, how many packs are there?

2. Each pack of gum has 3 pieces of gum in it.
If there are 15 pieces of gum altogether, how many packs are there?

3. Each pack of gum has 5 pieces of gum in it.
If there are 25 pieces of gum altogether, how many packs are there?

4. Each pack of gum has 5 pieces of gum in it.
If there are 35 pieces of gum altogether, how many packs are there?

5. Each pack of gum has 3 pieces of gum in it.
If there are 27 pieces of gum altogether, how many packs are there?

6. Each pack of gum has 6 pieces of gum in it.
If there are 24 pieces of gum altogether, how many packs are there?

7. A bag has 18 pieces of gum in it. Three girls want to share the gum equally.
How many pieces of gum should each girl get?

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 7

Skip-count the small rectangles by rows of 5 to find out how many small rectangles there are.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	
				50
				100

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 8

Use skip-counting to solve the problems.

1. Each pack of gum has 2 pieces of gum in it.
How many pieces of gum are in 12 packs of gum?

2. Each pack of gum has 3 pieces of gum in it.
How many pieces of gum are in 15 packs of gum?

3. Each pack of gum has 5 pieces of gum in it.
How many pieces of gum are in 10 packs of gum?

4. Each pack of gum has 5 pieces of gum in it.
How many pieces of gum are in 13 packs of gum?

5. Each pack of gum has 5 pieces of gum in it.
How many pieces of gum are in 23 packs of gum?

6. Each pack of gum has 6 pieces of gum in it.
How many pieces of gum are in 14 packs of gum?

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 9

Complete the skip-count tables. Try to do the problems by mental skip-counting. Then check your answers with repeated addition.

1. Skip-count table for 9 × 11

Number of groups	1	2	3	4	5	6	7	8	9	
Total in groups	11									

2. Skip-count table for 5 × 12

Number of groups	1	2	3	4	5					
Total in groups	12									

3. Skip-count table for 4 × 21

Number of groups	1	2	3	4						
Total in groups	21									

4. Skip-count table for 5 × 31

Number of groups	1	2	3	4	5					
Total in groups	31									

5. Skip-count table for 10 × 25

Number of groups	1	2	3	4	5	6	7	8	9	10
Total in groups	25									

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 10

Part 1. Use a calculator to do the problems below. What pattern do you see? Can you predict the answer before entering the problem into the calculator?

$10 \times 4 =$ _____
$10 \times 6 =$ _____
$4 \times 30 =$ _____
$30 \times 6 =$ _____
$30 \times 40 =$ _____
$40 \times 80 =$ _____
$50 \times 40 =$ _____
$30 \times 700 =$ _____

Part 2. Figure out the problems mentally. Check with a calculator or place-value blocks.

$4 \times$ (3 tens) = _____ tens = _____ones
$4 \times 30 =$_____

$6 \times$ (3 tens) = _____ tens = _____ ones
$6 \times 30 =$ _____

$4 \times$ (3 hundreds) = _____ hundreds = _____ ones
$4 \times 300 =$ _____

$6 \times$ (3 hundreds) = _____ hundreds = _____ones
$6 \times 300 =$_____

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 11

1. Use a calculator to do the problems below. What pattern do you see? Can you predict the answer before entering the problem into the calculator?

80 ÷ 4 = _____
120 ÷ 4 = _____
90 ÷ 3 = _____
120 ÷ 3 = _____
120 ÷ 6 = _____
180 ÷ 6 = _____
150 ÷ 3 = _____
320 ÷ 8 = _____

2. Figure out the problems mentally. Check with a calculator or place-value blocks.

40 ÷ 2 = 4 tens ÷ 2 = _____tens = _____ones
40 ÷ 2 = _____

60 ÷ 2 = 6 tens ÷ 2 = _____tens = _____ones
60 ÷ 2 = _____

240 ÷ 6 = 24 tens ÷ 6 = _____tens = _____ones
240 ÷ 6 = _____

150 ÷ 5 = 15 tens ÷ 5 = _____tens = _____ones
150 ÷ 5 = _____

640 ÷ 8 = 64 tens ÷ 8 = _____tens = _____ones
640 ÷ 8 = _____

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 12

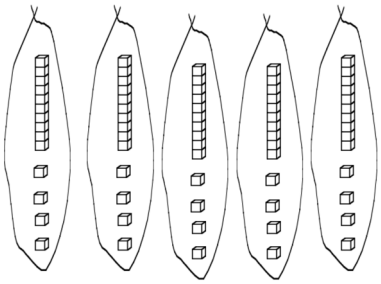
Problem 1. Finding 5 × 14.

In the picture, there are 5 bags, with 1 ten-block of cubes and 4 one-blocks of cubes in each bag. We want to know how many individual cubes there are altogether.

How many cubes are there in the 5 ten-blocks—how much is 5 times 10? 5 × 10 = _____

How many cubes are there in the 5 sets of 4 one-blocks—how much is 5 times 4? 5 × 4 = _____

How many cubes are there in the 5 sets of 14 cubes? 5 × 14 = _____



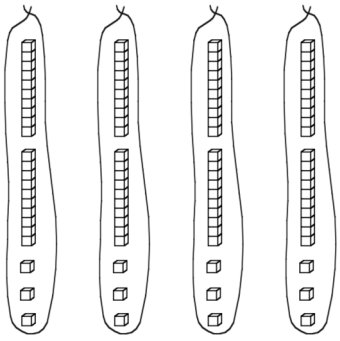
Problem 2. Finding 4 × 23.

In the picture, there are 4 bags, with 2 ten-blocks of cubes and 3 one-blocks of cubes in each bag. We want to know how many individual cubes there are altogether.

How many cubes are there in the 4 sets of 2 ten-blocks—how much is 4 times 20? 4 × 20 = _____

How many cubes are there in the 4 sets of 3 one-blocks—how much is 4 times 3? 4 × 3 = _____

How many cubes are there in the 4 sets of 23 cubes? 4 × 23 = _____



Name _____ Date _____

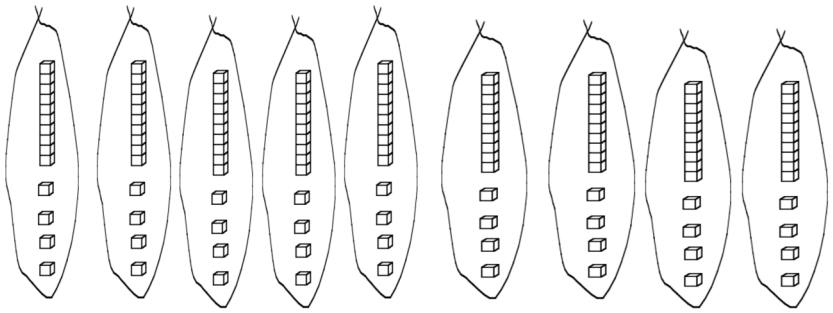
Problem 3. Finding 9 × 14.

In the picture, there are 9 bags, with 1 ten-block of cubes and 4 one-blocks of cubes in each bag. We want to know how many individual cubes there are altogether.

How many cubes are there in the 9 ten-blocks—how much is 9 times 10? 9 × 10 = _____

How many cubes are there in the 9 sets of 4 one-blocks—how much is 9 times 4? 9 × 4 = _____

How many cubes are there in the 9 sets of 14 cubes? 9 × 14 = _____



Name _____ Date _____

CBA Multiplication and Division

Student Sheet 13

Problem 1. Each bag contains 13 cubes. How many cubes are in 4 bags?

How many groups of 10 are there—how much is 4 times 10?	4 × 10 = _____
How many groups of 3 are there—how much is 4 times 3?	4 × 3 = _____
How many cubes are there altogether in 4 groups of 13?	4 × 13 = _____

Problem 2. Each bag contains 18 cubes. How many cubes are in 5 bags?

How many groups of 10 are there—how much is 5 times 10?	5 × 10 = _____
How many groups of 8 are there—how much is 5 times 8?	5 × 8 = _____
How many cubes are there altogether in 5 groups of 18?	5 × 18 = _____

Problem 3. Each bag contains 56 cubes. How many cubes are in 8 bags?

How many groups of 50 are there—how much is 8 times 50?	8 × 50 = _____
How many groups of 6 are there—how much is 8 times 6?	8 × 6 = _____
How many cubes are there altogether in 8 groups of 56?	8 × 56 = _____

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 14

Problem 1. Write the letter of the picture that matches each statement.

(a) 15 bags of 43 candies _____

(b) (10 bags of 40 candies) plus (5 bags of 3 candies) _____

(c) (10 bags of 43 candies) plus (5 bags of 43 candies) _____

A.

B.

C.

Problem 2. Use the pictures to help you decide which statements are true.

(a) 15 bags of 43 candies = (10 bags of 40 candies) plus (5 bags of 3 candies) T or F

(b) 15 bags of 43 candies = (10 bags of 43 candies) plus (5 bags of 43 candies) T or F

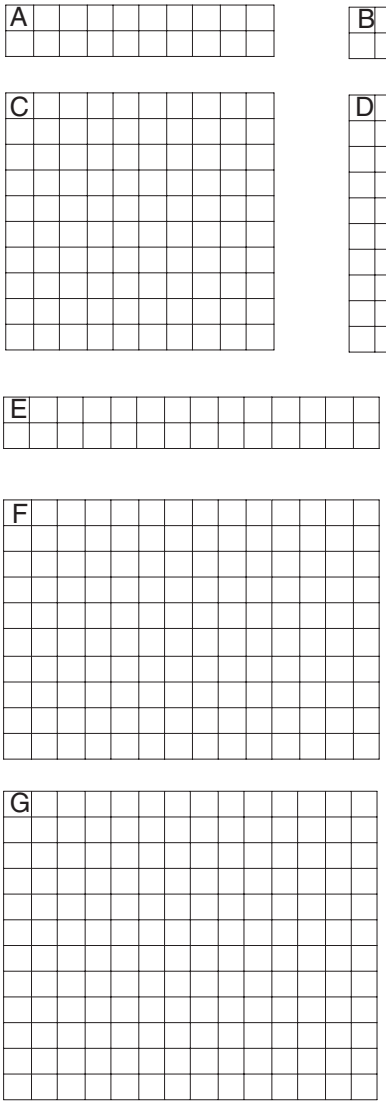
Explain your answer.

Name _____ Date _____

CBA Multiplication and Division

Student Sheet 15

What multiplication problems could we solve to find the number of squares in each rectangle? Write your answers on the rectangles.



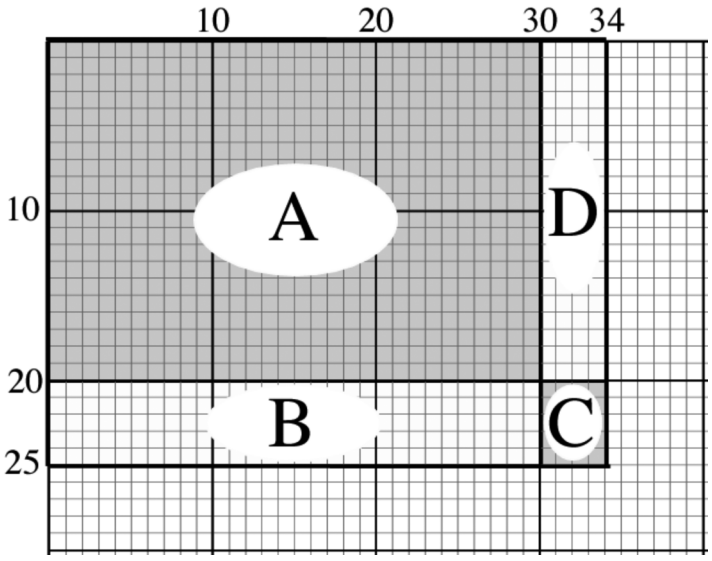
Name _____ Date _____

CBA Multiplication and Division

Student Sheet 16

Problem 1. Think about the problem 25 × 34.
Write the letters of the rectangles that show each of these parts.

20 × 30 = 600	20 × 4 = 80	5 × 30 = 150	5 × 4 = 20
_____	_____	_____	_____



Which numbers should be added together to find the answer to 25 × 34?

600 80 150 20

Explain why your answer is correct.

Problem 2. Use graph paper to solve each of the following problems by breaking them into four parts.

46 × 34 = _____
25 × 57 = _____
46 × 57 = _____

CBA Multiplication and Division

Student Sheet Answers

Although answers are provided for CBA student sheets, when assessing students' work on the sheets it is essential to determine the CBA levels of reasoning students use.

STUDENT SHEET 1

1. 8 cubes

2. 15 cubes

3. 20 pieces of candy

4. 3 cups

5. 4 cubes

6. 3 pennies

7. 6 bags

STUDENT SHEET 2

1. 8 cubes

2. 3 students

3. 4 cubes

4. 20 cents

5. 6 pieces

STUDENT SHEET 3

1. 8 cubes

2. 20 cents

3. 4 pieces

4. 18 cubes

5. 12 pieces of candy

6. 3 cups

7. 5 cubes

8. 3 pennies

9. 6 bags

STUDENT SHEET 4

There are 20 squares in the first grid, 30 in the second grid, and 18 in the third grid.

4, 8, 12, 16, 20

5, 10, 15, 20, 25, 30

3, 6, 9, 12, 15,18

STUDENT SHEET 5

1.	18 pieces	2, 4, 6, 8, 10, 12, 14, 16, 18
2.	21 pieces	3, 6, 9, 12, 15, 18, 21
3.	20 pieces	5, 10, 15, 20
4.	35 pieces	5, 10, 15, 20, 25, 30, 35
5.	50 pieces	5, 10, 15, 20, 25, 30, 35, 40, 45, 50
6.	24 pieces	6, 12, 18, 24

STUDENT SHEET 6

1.	7 packs	2, 4, 6, 8, 10, 12, 14
2.	5 packs	3, 6, 9, 12, 15
3.	5 packs	5, 10, 15, 20, 25
4.	7 packs	5, 10, 15, 20, 25, 30, 35
5.	9 packs	3, 6, 9, 12, 15, 18, 21, 24, 27
6.	4 packs	6, 12, 18, 24
7.	6 pieces	6, 12, 18

STUDENT SHEET 7

There are 130 small rectangles.

5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120, 125, 130

STUDENT SHEET 8

1. 24 pieces 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24

2. 45 pieces 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45

3. 50 pieces 5, 10, 15, 20, 25, 30, 35, 40, 45, 50

4. 65 pieces 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65

5. 115 pieces 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115

6. 84 pieces 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72, 78, 84

STUDENT SHEET 9

1.

Number of groups	1	2	3	4	5	6	7	8	9
Total in groups	11	22	33	44	55	66	77	88	99

2.

Number of groups	1	2	3	4	5
Total in groups	12	24	36	48	60

3.

Number of groups	1	2	3	4
Total in groups	21	42	63	84

4.

Number of groups	1	2	3	4	5
Total in groups	31	62	93	124	155

5.

Number of groups	1	2	3	4	5	6	7	8	9	10
Total in groups	25	50	75	100	125	150	175	200	225	250

STUDENT SHEET 10

1.

$10 \times 4 = 40$
$10 \times 6 = 60$
$4 \times 30 = 120$
$30 \times 6 = 180$
$30 \times 40 = 1200$
$40 \times 80 = 3200$
$50 \times 40 = 2000$
$30 \times 700 = 21{,}000$

Pattern: Multiply the nonzero digits then append the total number of zeros that were in the original two numbers.

2.

$4 \times$ (3 tens) = 12 tens = 120 ones
$4 \times 30 = 120$
$6 \times$ (3 tens) = 18 tens = 180 ones
$6 \times 30 = 180$
$4 \times$ (3 hundreds) = 12 hundreds = 1200 ones
$4 \times 300 = 1200$
$6 \times$ (3 hundreds) = 18 hundreds = 1800 ones
$6 \times 300 = 1800$

STUDENT SHEET 11

1.

$80 \div 4 = 20$
$120 \div 4 = 30$
$90 \div 3 = 30$
$120 \div 3 = 40$
$120 \div 6 = 20$
$180 \div 6 = 30$
$150 \div 3 = 50$
$320 \div 8 = 40$

Pattern: Divide the nonzero parts then append the number of zeros in the first number.

2.

$40 \div 2 = 4$ tens $\div 2 = 2$ tens = 20 ones
$40 \div 2 = 20$

$60 \div 2 = 6$ tens $\div 2 = 3$ tens = 30 ones
$60 \div 2 = 30$

$240 \div 6 = 24$ tens $\div 6 = 4$ tens = 40 ones
$240 \div 6 = 40$

$150 \div 5 = 15$ tens $\div 5 = 3$ tens = 30 ones
$150 \div 5 = 30$

640 ÷ 8 = 64 tens ÷ 8 = 8 tens = 80 ones
640 ÷ 8 = 80

STUDENT SHEET 12

Problem 1.

50 cubes	5 × 10 = 50
20 cubes	5 × 4 = 20
70 cubes	5 × 14 = 70

Problem 2.

80 cubes	4 × 20 = 80
12 cubes	4 × 3 = 12
92 cubes	4 × 23 = 92

Problem 3.

90 cubes	9 × 10 = 90
36 cubes	9 × 4 = 36
126 cubes	9 × 14 = 126

STUDENT SHEET 13

Problem 1.

4 groups of 10	4 × 10 = 40
4 groups of 3	4 × 3 = 12
52 cubes	4 × 13 = 52

Problem 2.

5 groups of 10	5 × 10 = 50
5 groups of 8	5 × 8 = 40
90 cubes	5 × 18 = 90

Problem 3.

8 groups of 50	8 × 50 = 400
8 groups of 6	8 × 6 = 48
448 cubes	8 × 56 = 448

STUDENT SHEET 14

1. (i) A

(ii) B

(iii) C

2. (a) F

(b) T

Students' explanations should reflect understanding of the distributive property.

STUDENT SHEET 15

A: 2 × 10 or 10 × 2 = 20

B: 2 × 4 or 4 × 2 = 8

C: 10 × 10 = 100

D: 10 × 4 or 4 ×10 = 40

E: 2 × 14 or 14 × 2 = 28

F: 10 × 14 or 14 × 10 = 140

G: 12 × 14 or 14 × 12 = 168

STUDENT SHEET 16

1. A, D, B, C

All of them; the four answers represent the four partial products.

2. 46 × 34 = 1564; 25 × 57 = 1425; 46 × 57 = 2622

4 partial products

40 × 30 = 1200	40 × 4 = 160	6 × 30 = 180	6 × 4 = 24
20 × 50 = 1000	20 × 7 = 140	5 × 50 = 250	5 × 7 = 35
40 × 50 =2000	40 × 7 = 280	6 × 50 = 300	6 × 7 = 42