## Unit 3

## Show What You Know

LESSON

Use any materials when they help.

1. Multiply. What strategies did you use?

a) 3 × 2

b) 3 × 4

c) 3 × 8

d)  $2 \times 6$ 

e) 4 × 6

f) 8 × 6

2. Multiply. What strategies did you use?

a) 5 × 8

b) 1 × 8

c) 9 × 0

e) 9 × 9

f) 8 × 10

g) 8 × 9

d) 7 × 6

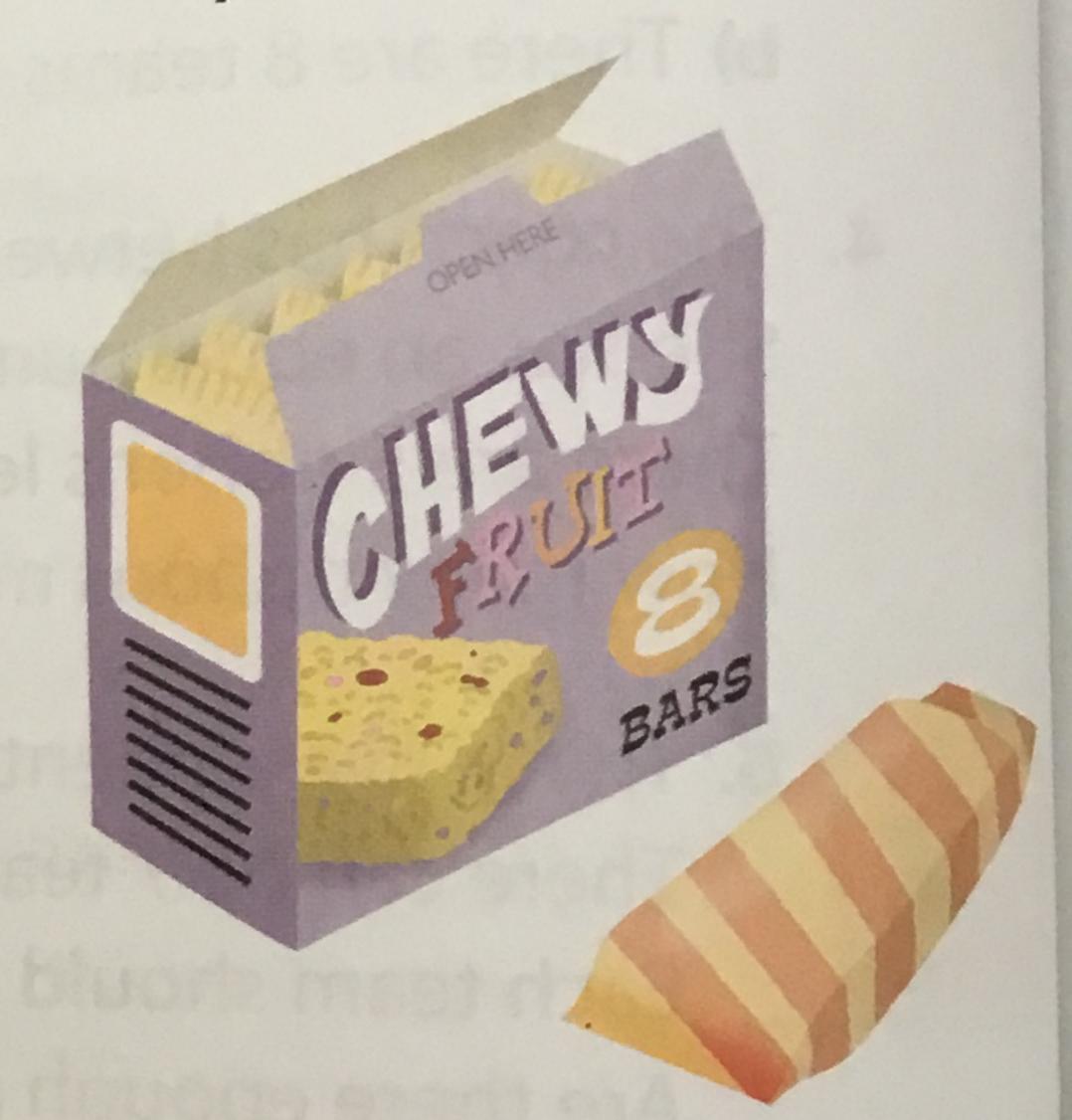
h) 4 × 8

- 3. There are 8 cereal bars in a box.
  - a) How many bars are in 2 boxes?
  - b) How many bars are in 4 boxes?
  - c) How many bars are in 8 boxes? How could you use one answer to get the next?
- 4. Copy this chart. Fill in the missing numbers. Describe each skip counting pattern.

×	4	5	6	7	8	9
4	16	20				
5		25		35		
6			36			54

- **5.** Ali knows that  $7 \times 6 = 42$ . How can he use this fact to find  $7 \times 7$  and  $7 \times 8$ ?
- 6. The answer to a multiplication question is 24. What might the question be?
  Write as many multiplication facts as you can.
  - 7. Use words, numbers, or pictures to explain your thinking.

    a) How might you use  $4 \times 7$  to find  $8 \times 7$ ?
    - b) How might you use  $5 \times 5$  to find  $8 \times 7$ ?
    - c) How might you use  $3 \times 10$  to find  $3 \times 9$ ?



8. Write a multiplication fact and a division fact for each array.



9. What might each missing number be? How many answers can you find?

a)  $\Box \times \bigcirc = 35$  b)  $\triangle \div \Box = 1$  c)  $\Box \times \bigcirc = 63$  d)  $\Box \div \triangle = 5$ 

10. Divide.

a) 45 ÷ 9

b)  $32 \div 8$  c)  $56 \div 7$  d)  $27 \div 3$  e)  $9 \div 9$ 

11. Find each product.

Then write a related multiplication fact and two division facts.

a)  $6 \times 7 = \Box$  b)  $6 \times 9 = \Box$  c)  $8 \times 3 = \Box$  d)  $5 \times 7 = \Box$ 

12. Write four related facts for each set of numbers.

a) 9, 7, 63

**b)** 4, 5, 20

c) 6, 8, 48

13. Which multiplication facts will help you find the answers?

a) 30 ÷ 6

b) 64 ÷ 8

c) 42 ÷ 7

- 14. There are 8 flowers in a bunch. Suppose you want to buy 40 flowers. How many bunches would you need to buy? Write an equation for the problem. Solve the equation.
- 15. Use the data below. Write a problem that can be solved by multiplying or dividing. Solve your problem.

There are 48 apples. There are 5 boys and 3 girls.

## NIT Learning Goals

use different mental math strategies to multiply and divide

multiply by 0, 1, and 10

divide by 1

recall multiplication and division facts

identify and describe patterns in a multiplication chart

relate multiplication and division

pose and solve story problems using multiplication and division

write and solve equations