lesson seven - student resource sheet

Lesson Objective: Multiply numbers with factors through nine.

Vocabulary Box

multiplication — An operation we use to combine equal groups and to shorten repeated addition. Example: Three groups of 7, or 7 + 7 + 7, is shown as 3 x 7, and the answer is 21.

factor — One of two or more expressions that are multiplied to get a product. Example: In 3 x 7 = 21, the number 3 is a factor, and the number 7 is the other factor.

product — The result of two numbers being multiplied; that is, the answer in a multiplication problem. Example: The product of 3 x 7 is 21.

Guided Practice

I. Directions: Find the answer to the following questions, working with your partner and the color tiles.

1. Seven groups of 4 equals _____ .

$$\begin{array}{r} 7 \\ \times\ 4 \\ \hline \end{array}$$

2. Work backwards. Look at the following multiplication problem. Draw a model to show that:

$$\begin{array}{r} 8 \\ \times\ 3 \\ \hline 24 \end{array}$$

3. 7 x 2 8 x 1 9 x 5

II. Directions: Practice more.

Three groups of 9 = _____
9 + 9 + 9 = _____
3 x 9 = _____

Eight groups of 7 = _____
7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 = _____
8 x 7 = _____

Summary/Closure

A. Vocabulary Words
Write a meaningful definition, in your own words, for each vocabulary word. Give an example for each word.

	Definition	Example
multiplication		
factor		
product		

B. Summarize What You Have Learned
Directions: Draw a set of stars that shows the multiplication problem 4 x 6. Find the product of these two factors. Explain, in your own words, what you learned today. You will use this as a personal reminder.

lesson eight - student resource sheet

Lesson Objective: Multiply numbers with factors through nine.

Vocabulary Box

multiplication — An operation we use to combine equal groups and to shorten repeated addition. Example: Three groups of 7, or 7 + 7 + 7, is shown as 3 x 7, and the answer is 21.

factor — One of two or more expressions that are multiplied to get a product. Example: In 3 x 7 = 21, the number 3 is a factor, and the number 7 is the other factor.

product — The result of two numbers being multiplied; that is, the answer in a multiplication problem. Example: The product of 3 x 7 is 21.

Independent Practice

Directions: Please complete the following practice problems on your own. Your teacher will review the answers. Make sure you show all your work.

I. Find the answers to each group.

1. Three groups of 9 = _____

   9 + 9 + 9 = _____

   3 x 9 = _____

2. Five groups of 4 = _____

   4 + 4 + 4 + 4 + 4 = _____

   5 x 4 = _____

3. Four groups of 8 = _____

   8 + 8 + 8 + 8 = _____

   4 x 8 = _____

4. Three groups of 6 = _____

   6 + 6 + 6 = _____

   3 x 6 = _____

II. Complete the following problems as fast as you can!

1. 6 x 5	2. 7 x 3	3. 3 x 9	4. 9 x 4
5. 8 x 4	6. 6 x 9	7. 1 x 3	8. 0 x 8
9. 7 x 6	10. 3 x 8	11. 9 x 2	12. 2 x 7

Directions: Write the product for each.

1. Nine groups of 5 _____

2. Seven groups of 8 _____

3. Three groups of 3 _____

Problem Solving

1. Hannah and three of her friends had pizza for dinner. Each of them ate three pieces of pizza. How many pieces of pizza were eaten altogether?

   _____ pieces of pizza

   Use what you know about multiplication and problem solving to explain how you determined your answer. Use words, numbers, or both in your explanation.

   _____

   _____

   _____

   _____

   _____

   _____

2. There are five students in each row in Nick's third-grade class. There are four rows in the classroom. How many students are in Nick's class?

   _____ students

   Use what you know about multiplication and problem solving to explain how you determined your answer. Use words, numbers, or both in your explanation.

   _____

   _____

   _____

   _____

   _____

   _____

Directions: Model each multiplication problem below by drawing equal groups in the blank space on the page. Then, write the product for each problem.

1.	6	2.	3	3.	8	4.	7
	x 8		x 9		x 9		x 7

lesson nine - student resource sheet

Lesson Objective: Multiply multi-digit numbers by a one-digit number with no regrouping.

Vocabulary Box

place value — The position, or place, of a digit in a number that tells the value of that digit. Example: The value of the digit 4 in 34,568 is 4,000.

multiplication — An operation we use to combine equal groups and to shorten repeated addition. Example: Three groups of 4 equals 12, or 3 x 4 = 12.

factor — One of two or more expressions that are multiplied to get a product. Example: The first factor of 13 x 3 is 13, and the second factor is 3.

product — The result of two numbers being multiplied; that is, the answer in a multiplication problem. Example: The product of 13 x 3 is 39.

Guided Practice

I. Directions: Complete the following practice problems with your partner. You may use base ten blocks to assist you. Your teacher will review the answers. Make sure you show all your work.

1. 43
   x 2

2. Draw 232 x 2 using base ten block models. Then, find the product.

$$\begin{array}{r} 232 \\ \times \quad 2 \\ \hline \end{array}$$

II. Multiply the following numbers.

1. $\begin{array}{r} 443 \\ \times \quad 2 \\ \hline \end{array}$

2. $\begin{array}{r} 324 \\ \times \quad 2 \\ \hline \end{array}$

3. $\begin{array}{r} 231 \\ \times \quad 3 \\ \hline \end{array}$

Summary/Closure

A. Vocabulary Words

For each vocabulary word listed, draw a line that connects it to the correct definition.

place value	an operation we use to combine equal groups and to shorten repeated addition
multiplication	the result of two numbers being multiplied
factor	the position, or place, of a digit in a number that tells the value of that digit
product	one of two or more expressions that are multiplied to get a product; that is, the answer in a multiplication problem.

B. Summarize What We Learned Today

Directions: Create your own multi-digit multiplication problem. Make sure you use numbers that are small enough so you will not have to regroup.

Then, explain how you determined your answer and why it is correct. You will use this explanation as a personal reminder.