# Student Workbook

## Overview

The student workbook pages should be copied and used with students in conjunction with the lessons. Many teachers have students make a booklet of the workbook pages. Use the large flash card pictures for the cover of the booklet. Students love coloring the large pictures. (Student workbooks may be purchased from www.multiplication.com.)

## Lesson Format

Each lesson is designed to give conceptual practice to build understanding and practice to help secure the memory.

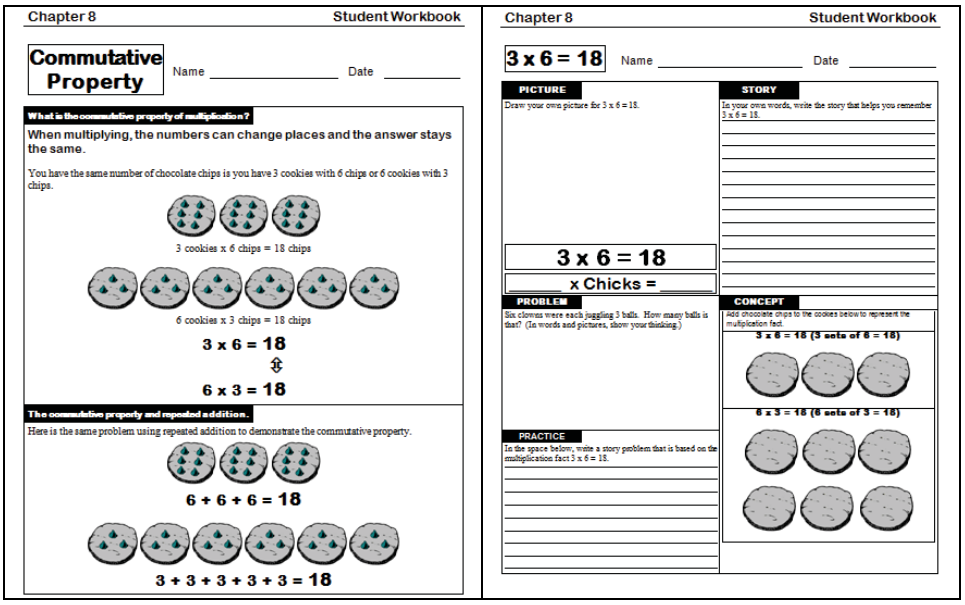
In the teaching manual, the pages are facing one another. When you printout the pages for students, print them back to back.

## Cookie Math

The student workbook is filled with cookie math, stories, pictures, and activities. The lessons are fun, challenging, and anchor learning.

**Teacher Tip**

In the teaching manual, the pages are **facing one another.** When you print out the pages for students, print them **back to back.**



Chapter 8 Student Workbook

**Commutative Property** Name _____ Date _____

**What is the commutative property of multiplication?**

**When multiplying, the numbers can change places and the answer stays the same.**

You have the same number of chocolate chips is you have 3 cookies with 6 chips or 6 cookies with 3 chips.

3 cookies x 6 chips = 18 chips

6 cookies x 3 chips = 18 chips

**3 x 6 = 18**

⇕

**6 x 3 = 18**

**The commutative property and repeated addition.**

Here is the same problem using repeated addition to demonstrate the commutative property.

**6 + 6 + 6 = 18**

**3 + 3 + 3 + 3 + 3 + 3 = 18**

Chapter 8 Student Workbook

**3 x 6 = 18** Name _____ Date _____

**PICTURE**

Draw your own picture for 3 x 6 = 18.

**3 x 6 = 18**

**x Chicks = ____**

**STORY**

In your own words, write the story that helps you remember 3 x 6 = 18.

**PROBLEM**

Six clowns were each juggling 3 balls. How many balls is that? (In words and pictures, show your thinking.)

**CONCEPT**

Add chocolate chips to the cookies below to represent the multiplication fact.

**3 x 6 = 18 (3 sets of 6 = 18)**

**6 x 3 = 18 (6 sets of 3 = 18)**

**PRACTICE**

In the space below, write a story problem that is based on the multiplication fact 3 x 6 = 18.

# Repeated Addition

Name _____ Date _____

## What is Multiplication?

**Multiplication is repeated addition.**

You have three six-packs of soda. How many cans of soda do you have?

There are two ways to find the answer. You can add together the number of cans in each six pack:

**6 + 6 + 6 = 18**

Or you can multiply to find how many sets you have. You have:

**3 sets of 6 = 18**

This can be written:

**3 x 6 = 18**

## Cookie Math

To help you understand multiplication, throughout this book we are going to use chocolate chip cookies. YUM!

Let's look at the same repeated addition problem using cookies.

If you have three cookies, with six chocolate chips on each cookie, how many chocolate chips do you have?

To find the answer, you can add:

**6 chips + 6 chips + 6 chips = 18 chips**

Or you can multiply:

**3 cookies x 6 chips = 18 chips**

## Writing the Problem

Multiplication problems can be written two ways; on a line or in a column.

**Line → 3 x 6 = 18**

**Column →**

$$\begin{array}{r} 3 \\ \times\ 6 \\ \hline 18 \end{array}$$

## Multiplication Terms

**Factor ↓ Factor ↓ Product ↓**

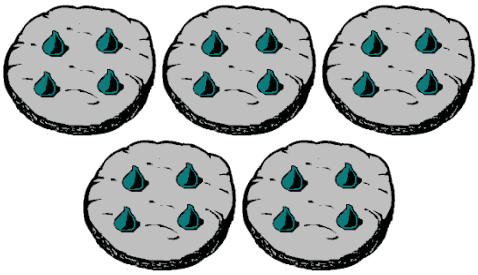
**3 x 6 = 18**

$$\begin{array}{rl} 3 & \leftarrow \text{Factor} \\ \times\ 6 & \leftarrow \text{Factor} \\ \hline 18 & \leftarrow \text{Product} \end{array}$$

**Repeated Addition Practice**

Name _____ Date _____

## Cookie Math #1

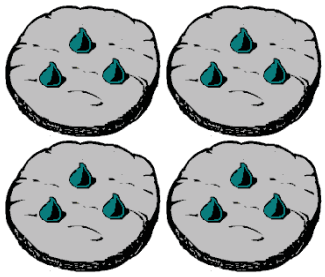


| | |
|---|---|
| 5 | 5 Cookies |
| x 4 | 4 Chocolate chips per cookie |
| 20 | 20 Total chocolate chips |

## Cookie Math #2

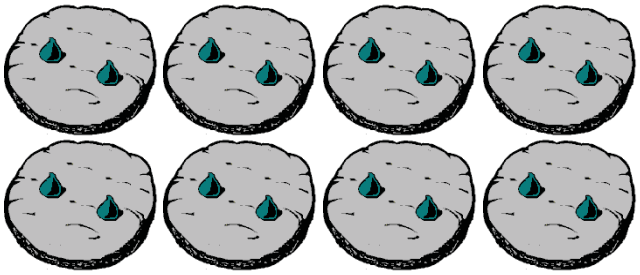
| | |
|---|---|
| 3 | ____ Cookies |
| x ☐ | 5 Chocolate chips per cookie |
| ☐ | 15 Total chocolate chips |

## Cookie Math #3



| | |
|---|---|
| ☐ | ____ Cookies |
| x 3 | ____ Chocolate chips per cookie |
| ☐ | ____Total chocolate chips |

## Cookie Math #4



| | |
|---|---|
| ☐ | ____ Cookies |
| x ☐ | ____ Chocolate chips per cookie |
| ☐ | ____Total chocolate chips |

# Commutative Property

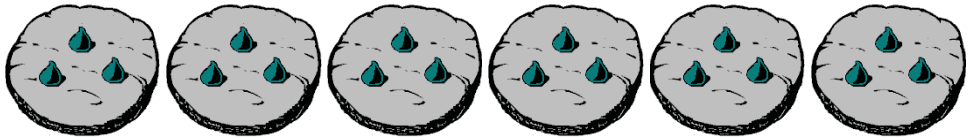
Name _____ Date _____

**What is the commutative property of multiplication?**

**When multiplying, the numbers can change places and the answer stays the same.**

You have the same number of chocolate chips if you have 3 cookies with 6 chips or 6 cookies with 3 chips.

3 cookies x 6 chips = 18 chips



6 cookies x 3 chips = 18 chips

**3 x 6 = 18**

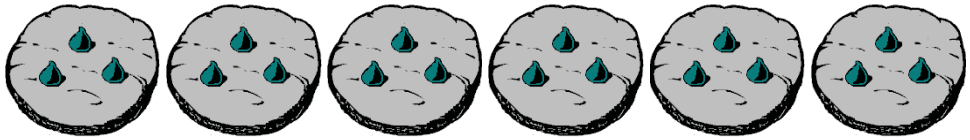
⇳

**6 x 3 = 18**

**The commutative property and repeated addition.**

Here is the same problem using repeated addition to demonstrate the commutative property.

**6 + 6 + 6 = 18**

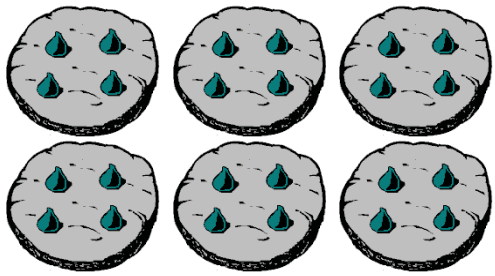


**3 + 3 + 3 + 3 + 3 + 3 = 18**

**Commutative Property Practice**

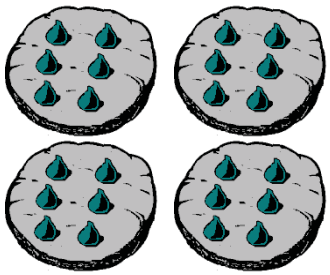
Name _____ Date _____

## Cookie Math #1



| | |
|---|---|
| 6 | 6 Cookies |
| x 4 | 4 Chocolate chips per cookie |
| 24 | 24 Total chocolate chips |

## Cookie Math #2

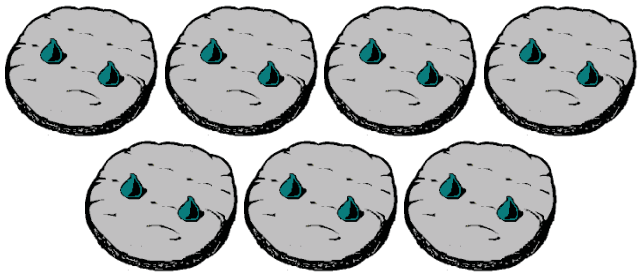


| | |
|---|---|
| 4 | 4 Cookies |
| x 6 | ____ Chocolate chips per cookie |
| | 24 Total chocolate chips |

## Cookie Math #3

| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

## Cookie Math #4



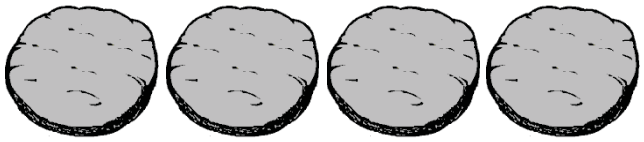
| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

# Multiplication by ZERO

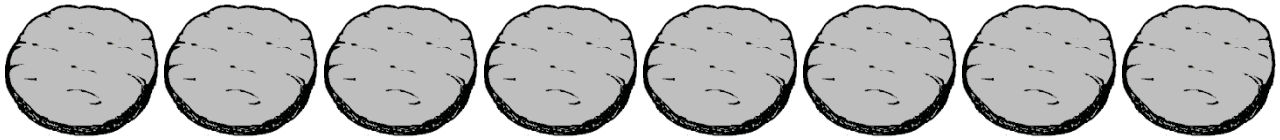
Name _____ Date _____

## Multiplying a number by 0

**Zero times any number is always zero.**



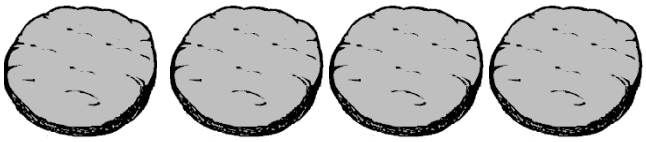
4 cookies x 0 chips = 0 chips



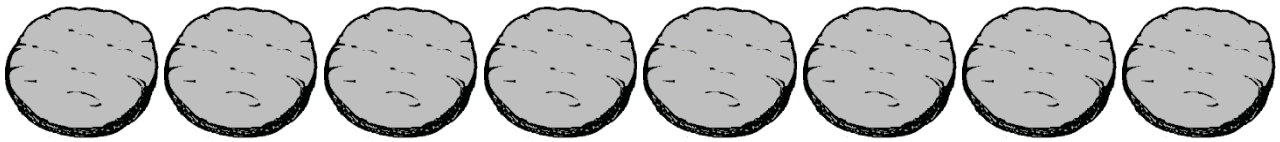
8 cookies x 0 chips = 0 chips

## Repeated Addition

Here is the same problem using repeated addition to demonstrate the commutative property.



**0 + 0 + 0 + 0 = 0**



**0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 = 0**

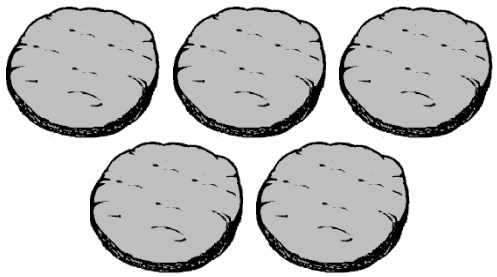
**Any number times 0 is always zero!**

***(That's the way the cookie crumbles.)***

**Multiplication by 0 Practice**

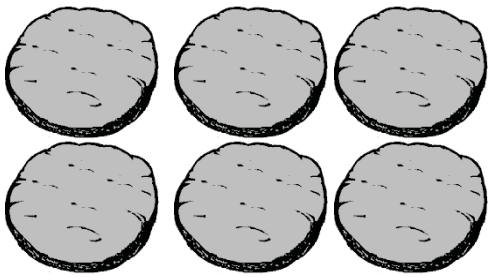
Name _____ Date _____

**Cookie Math #1**



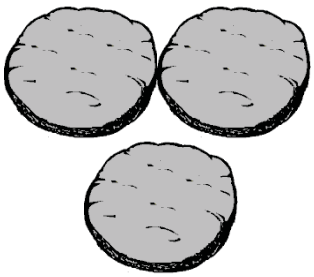
| | |
|---|---|
| 5 | 5 Cookies |
| x 0 | 0 Chocolate chips per cookie |
| 0 | 0 Total chocolate chips |

**Cookie Math #2**



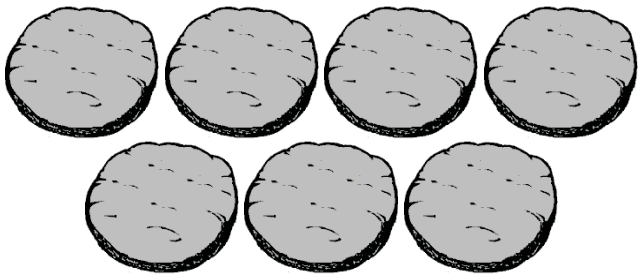
| | |
|---|---|
| 6 | 6 Cookies |
| x | ____ Chocolate chips per cookie |
| | 0 Total chocolate chips |

**Cookie Math #3**



| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

**Cookie Math #4**



| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

# Multiplication by ONE

Name _____ Date _____

## Multiplying a number by 1

**Any number multiplied by one is that number.**

5 cookies x 1 chip = 5 chips

7 cookies x 1 chip = 7 chips

## Repeated Addition

Here is the same problem using repeated addition to demonstrate the commutative property.

**1 + 1 + 1 + 1 + 1 = 5**

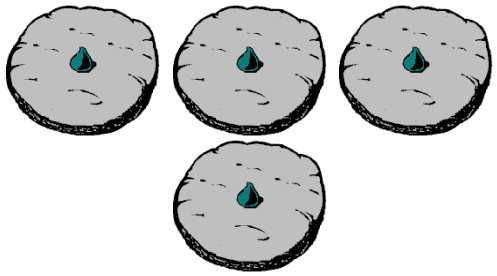
**1 + 1 + 1 + 1 + 1 + 1 + 1 = 7**

**Any number times 1 is that number.**

**Multiplication by 1 Practice**

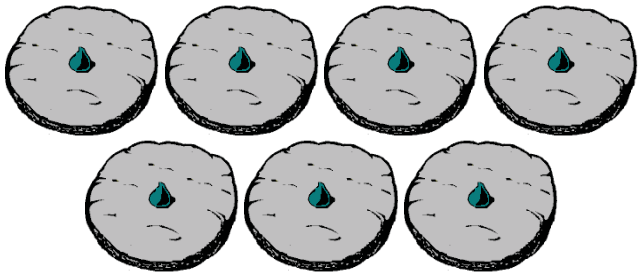
Name _____ Date _____

## Cookie Math #1



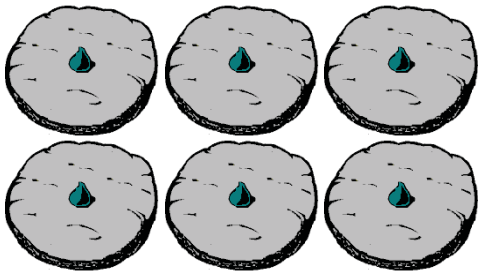
| | |
|---|---|
| 4 | 4 Cookies |
| x 1 | 1 Chocolate chip per cookie |
| 4 | 4 Total chocolate chips |

## Cookie Math #2



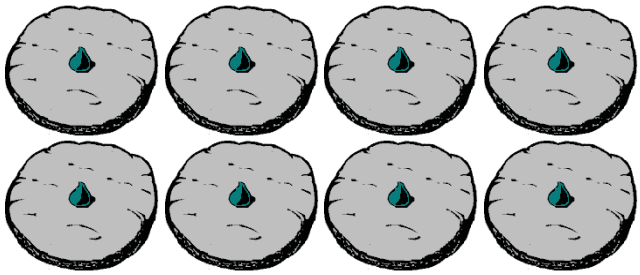
| | |
|---|---|
| 7 | ____ Cookies |
| x | 1 Chocolate chip per cookie |
| | 7 Total chocolate chips |

## Cookie Math #3



| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

## Cookie Math #4



| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

# The Good News

Name _____ Date _____

## ALL the Times Tables

**When you look at all the times tables you need to learn, it seems overwhelming. There are 100 facts to learn! (This is good news???)**

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| **0** | 0 x 0 | 0 x 1 | 0 x 2 | 0 x 3 | 3 x 4 | 0 x 5 | 0 x 6 | 0 x 7 | 0 x 8 | 0 x 9 |
| **1** | 1 x 0 | 1 x 1 | 1 x 2 | 1 x 3 | 1 x 4 | 1 x 5 | 1 x 6 | 1 x 7 | 1 x 8 | 1 x 9 |
| **2** | 2 x 0 | 2 x 1 | 2 x 2 | 2 x 3 | 2 x 4 | 2 x 5 | 2 x 6 | 2 x 7 | 2 x 8 | 2 x 9 |
| **3** | 3 x 0 | 3 x 1 | 3 x 2 | 3 x 3 | 3 x 4 | 3 x 5 | 3 x 6 | 3 x 7 | 3 x 8 | 3 x 9 |
| **4** | 4 x 0 | 4 x 1 | 4 x 2 | 4 x 3 | 4 x 4 | 4 x 5 | 4 x 6 | 4 x 7 | 4 x 8 | 4 x 9 |
| **5** | 5 x 0 | 5 x 1 | 5 x 2 | 5 x 3 | 5 x 4 | 5 x 5 | 5 x 6 | 5 x 7 | 5 x 8 | 5 x 9 |
| **6** | 6 x 0 | 6 x 1 | 6 x 2 | 6 x 3 | 6 x 4 | 6 x 5 | 6 x 6 | 6 x 7 | 6 x 8 | 6 x 9 |
| **7** | 7 x 0 | 7 x 1 | 7 x 2 | 7 x 3 | 7 x 4 | 7 x 5 | 7 x 6 | 7 x 7 | 7 x 8 | 7 x 9 |
| **8** | 8 x 0 | 8 x 1 | 8 x 2 | 8 x 3 | 8 x 4 | 8 x 5 | 8 x 6 | 8 x 7 | 8 x 8 | 8 x 9 |
| **9** | 9 x 9 | 9 x 1 | 9 x 2 | 9 x 3 | 9 x 4 | 9 x 5 | 9 x 6 | 9 x 7 | 9 x 8 | 9 x 9 |

## Zero and One

**Wait, you have already learned the zero and one times tables. Let's remove those from the chart. (Removing the 0 and 1 times tables leaves only 64 facts to learn.)**

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| **0** | | | | | | | | | | |
| **1** | | | | | | | | | | |
| **2** | | | 2 x 2 | 2 x 3 | 2 x 4 | 2 x 5 | 2 x 6 | 2 x 7 | 2 x 8 | 2 x 9 |
| **3** | | | 3 x 2 | 3 x 3 | 3 x 4 | 3 x 5 | 3 x 6 | 3 x 7 | 3 x 8 | 3 x 9 |
| **4** | | | 4 x 2 | 4 x 3 | 4 x 4 | 4 x 5 | 4 x 6 | 4 x 7 | 4 x 8 | 4 x 9 |
| **5** | | | 5 x 2 | 5 x 3 | 5 x 4 | 5 x 5 | 5 x 6 | 5 x 7 | 5 x 8 | 5 x 9 |
| **6** | | | 6 x 2 | 6 x 3 | 6 x 4 | 6 x 5 | 6 x 6 | 6 x 7 | 6 x 8 | 6 x 9 |
| **7** | | | 7 x 2 | 7 x 3 | 7 x 4 | 7 x 5 | 7 x 6 | 7 x 7 | 7 x 8 | 7 x 9 |
| **8** | | | 8 x 2 | 8 x 3 | 8 x 4 | 8 x 5 | 8 x 6 | 8 x 7 | 8 x 8 | 8 x 9 |
| **9** | | | 9 x 2 | 9 x 3 | 9 x 4 | 9 x 5 | 9 x 6 | 9 x 7 | 9 x 8 | 9 x 9 |

## Commutative Property

**The commutative property lets us remove the repeats. We only need to learn them once. (Removing the repeats leaves only 36 facts to learn.)**

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

## The GOOD News

**You are going to learn some super quick and easy ways of remembering the 2's, 5's, and 9's. (Removing these leaves only 15 facts.)**

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

## The GREAT News

**You will be using pictures, games, and stories to make learning the remaining 15 multiplication facts a SNAP!**

# Multiplication by Two

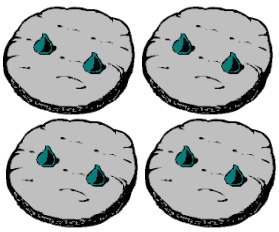
Name _____ Date _____

## Multiplying a Number by 2

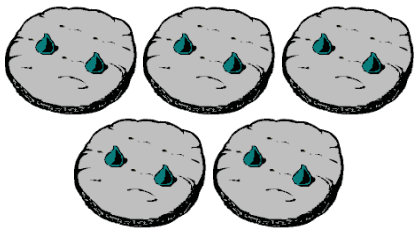
**To multiply by 2, just double the number.**

**2 x 2 = 4**
2 + 2 = 4 (2 doubled is 4)

**3 x 2 = 6**
3 + 3 = 6 (3 doubled is 6)

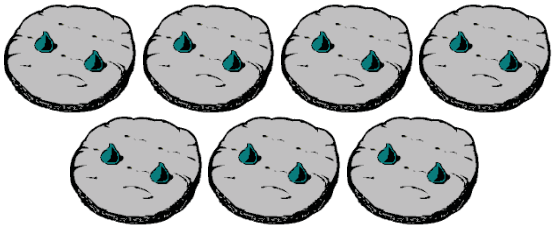


**4 x 2 = 8**
4 + 4 = 8 (4 doubled is 8)

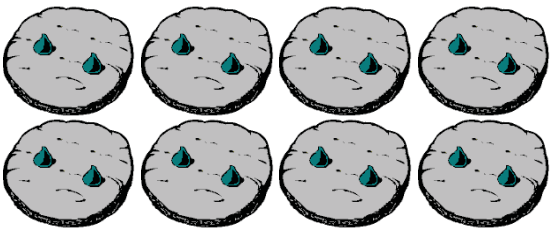


**5 x 2 = 10**
5 + 5 = 10 (5 doubled is 10)

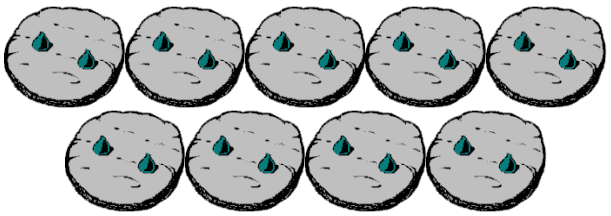
**6 x 2 = 12**
6 + 6 = 12 (6 doubled is 12)



**7 x 2 = 14**
7 + 7 = 14 (7 doubled is 14)



**8 x 2 = 16**
8 + 8 = 16 (8 doubled is 16)

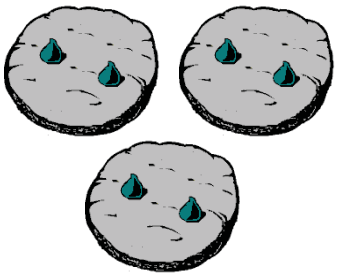


**9 x 2 = 18**
9 + 9 = 18 (9 doubled is 18)

**Multiplication by 2 Practice**

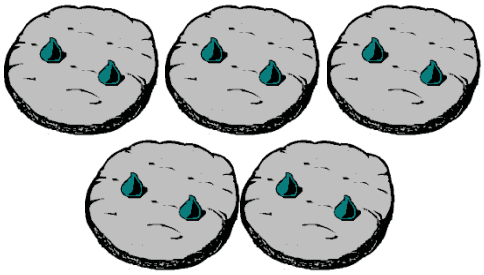
Name _____ Date _____

## Cookie Math #1



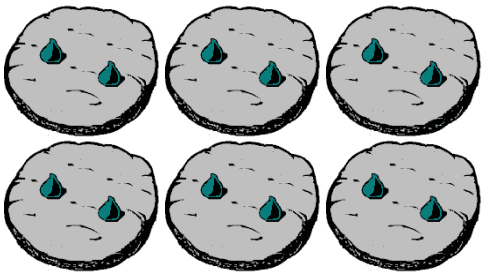
| | |
|---|---|
| 3 | 3 Cookies |
| x 2 | 2 Chocolate chips per cookie |
| 6 | 6 Total chocolate chips |

## Cookie Math #2



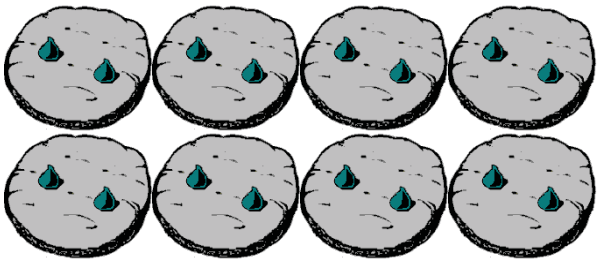
| | |
|---|---|
| 5 | ____ Cookies |
| x | 2 Chocolate chips per cookie |
| | 10 Total chocolate chips |

## Cookie Math #3



| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

## Cookie Math #4



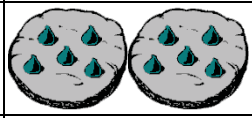
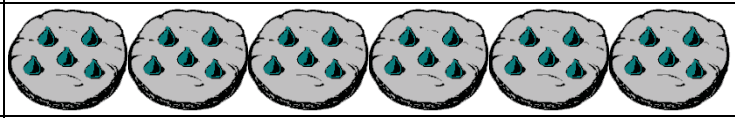
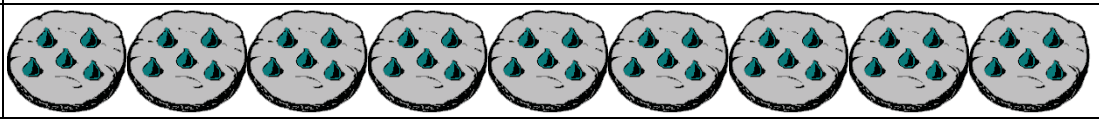
| | |
|---|---|
| | ____ Cookies |
| x | ____ Chocolate chips per cookie |
| | ____Total chocolate chips |

# Multiplication by Five

Name _____ Date _____

**Multiplying a number by 5**

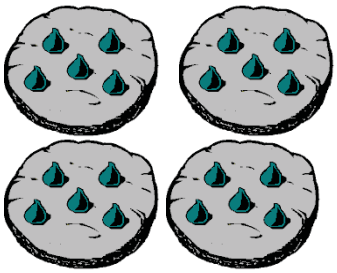
**Count by five to multiply any number times 5 (5, 10, 15, 20, 25, 30, 35, 40, 45).**

| | |
|---|---|
| 1 x 5 = 5 | |
| 2 x 5 = 10 |  |
| 3 x 5 = 15 | |
| 4 x 5 = 20 | |
| 5 x 5 = 25 | |
| 6 x 5 = 30 |  |
| 7 x 5 = 35 | |
| 8 x 5 = 40 | |
| 9 x 5 = 45 |  |

**Multiplication by 5 Practice**

Name _____ Date _____

## Cookie Math #1

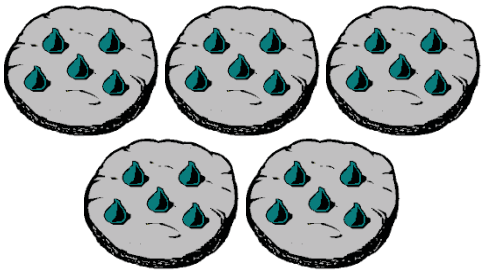


| | |
|---|---|
| 4 | 4 Cookies |
| x 5 | 5 Chocolate chips per cookie |
| 20 | 20 Total chocolate chips |

## Cookie Math #2

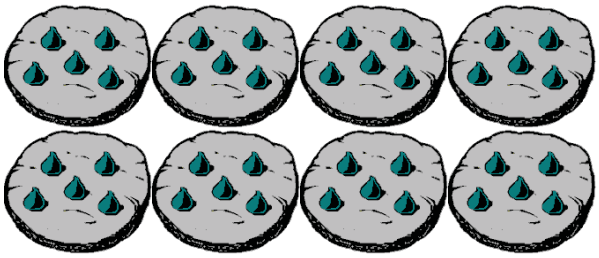
| | |
|---|---|
| 3 | ____ Cookies |
| x ☐ | 5 Chocolate chips per cookie |
| ☐ | 15 Total chocolate chips |

## Cookie Math #3



| | |
|---|---|
| ☐ | ____ Cookies |
| x ☐ | ____ Chocolate chips per cookie |
| ☐ | ____Total chocolate chips |

## Cookie Math #4



| | |
|---|---|
| ☐ | ____ Cookies |
| x ☐ | ____ Chocolate chips per cookie |
| ☐ | ____Total chocolate chips |

# Multiplication by Nine

Name _____ Date _____

**Multiplying a number by 9**

**Method 1 (One Less Equals Nine)**

**The 'One Less Equals Nine' method of learning the nines is super simple after you learn the steps.**

**STEP 1 – Figure out the FIRST NUMBER of the answer (ONE LESS).**
**The first number in the answer will always be 1 less than the number.**

**1 x 9 = *0*** **(1 x 9 Is the only goofy answer because 1 less than 1 is 0)**
**2 x 9 = 1__** ***(1 less than 2 is 1)***
**3 x 9 = 2__** ***(1 less than 3 is 2)***
**4 x 9 = 3__** ***(1 less than 4 is 3)***
**5 x 9 = 4__** ***(1 less than 5 is 4)***
**6 x 9 = 5__** ***(1 less than 6 is 5)***
**7 x 9 = 6__** ***(1 less than 7 is 6)***
**8 x 9 = 7__** ***(1 less than 8 is 7)***
**9 x 9 = 8__** ***(1 less than 9 is 8)***

**STEP 2 – Calculate the SECOND NUMBER in the answer (EQUALS NINE).**
**The first number plus the second number equals 9.**

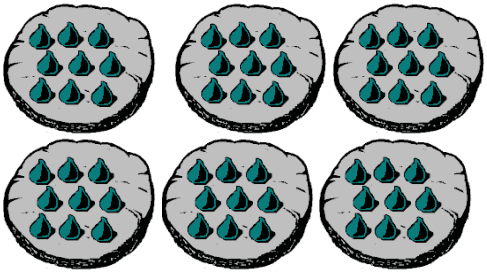
**1 x 9 = 09** ***(0 + 9 = 9)***
**2 x 9 = 18** ***(1 + 8 = 9)***
**3 x 9 = 27** ***(2 + 7 = 9)***
**4 x 9 = 36** ***(3 + 6 = 9)***
**5 x 9 = 45** ***(4 + 5 = 9)***
**6 x 9 = 54** ***(5 + 4 = 9)***
**7 x 9 = 63** ***(6 + 3 = 9)***
**8 x 9 = 72** ***(7 + 2 = 9)***
**9 x 9 = 81** ***(8 + 1 = 9)***

**Nine times any number is easy. Just remember ONE LESS EQUALS NINE. The first number in the answer will be ONE LESS. The second number in the answer will equal the nine minus the first number.**

**Multiplication by 9 Practice**

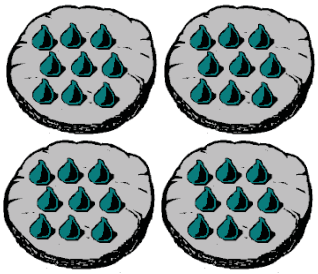
Name _____ Date _____

## Cookie Math #1



| | |
|---|---|
| 6 | 6 Cookies |
| x 9 | 9 Chocolate chips per cookie |
| 54 | 54 Total chocolate chips |

## Cookie Math #2

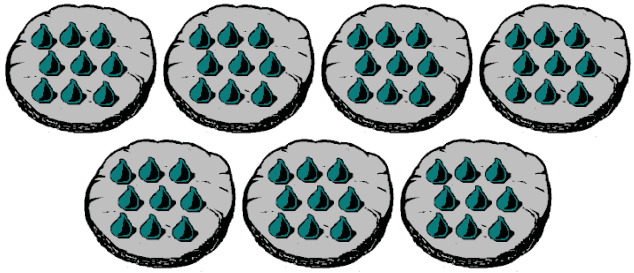


| | |
|---|---|
| 4 | ____ Cookies |
| x ☐ | 9 Chocolate chips per cookie |
| ☐ | 36 Total chocolate chips |

## Cookie Math #3

| | |
|---|---|
| ☐ | ____ Cookies |
| x ☐ | ____ Chocolate chips per cookie |
| ☐ | ____Total chocolate chips |

## Cookie Math #4



| | |
|---|---|
| ☐ | ____ Cookies |
| x ☐ | ____ Chocolate chips per cookie |
| ☐ | ____Total chocolate chips |

# Remembering with Pictures

Name _____ Date _____

**Pictures Help Us Remember**

**We REMEMBER pictures! Most people find numbers difficult to remember, but pictures are easy to remember. So, for the last 15 multiplication facts, we are going to remember them with pictures and stories.**

**Making Memories Easy to Remember**

1. **FUNNY pictures are easier to remember. (People usually don't forget funny, goofy, silly pictures.)**
2. **STRANGE pictures are easy to remember (weird, unbelievable, pictures stand out in our memory).**
3. **EXAGGERATED pictures are easy to remember (gigantic, many, huge).**
4. **ACTION helps you remember pictures.**

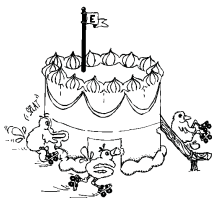
**To make the remaining multiplication facts easy to remember, the pictures will be FUNNY and STRANGE and EXAGGERATED.**

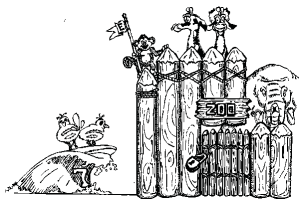
**Let's practice**

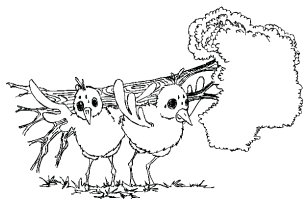
| | |
|---|---|
| Draw a picture of a ball.<br><br>(You see balls every day, so this picture will probably not be easy to remember.) | **FUNNY** – Draw a funny picture of a ball. (Example: A girl is wearing basketball earrings. A soccer player caught the ball in his mouth.) |

| | |
|---|---|
| **STRANGE** – Draw a strange picture of a ball. (Example: A clear bowling ball with goldfish swimming in it.) | **EXAGGERATED** – Draw a picture of a ball with something exaggerated. (Examples: You open your closet door and out fall thousands of balls. You see a GIANT ball rolling toward you.) |
| **ACTION** – Draw a picture involving a ball and action. (Example: You are riding a bouncing ball down the street. You are dodging balls being fired from a cannon.) | Draw a picture of your own that is easy to remember (funny, strange, exaggerated, or action filled). |

**Here are a few of the funny pictures we will use to learn the times tables.**







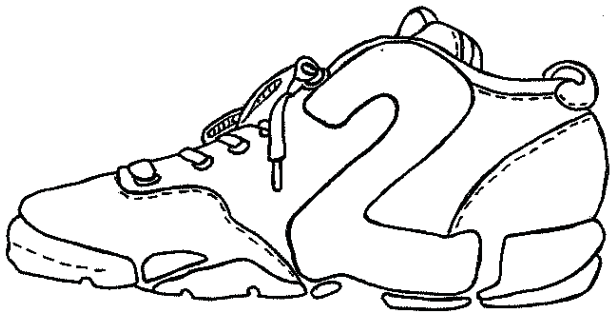
# Numbers

Name _____ Date _____

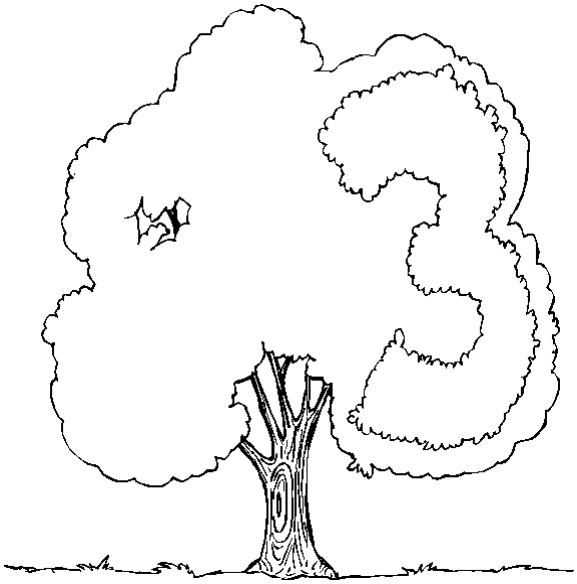
**Picturing the NUMBERS**

**For the rest of the multiplication facts, we will use PICTURES to help us remember the answers. Each number in the problem will always be based on the same picture.**

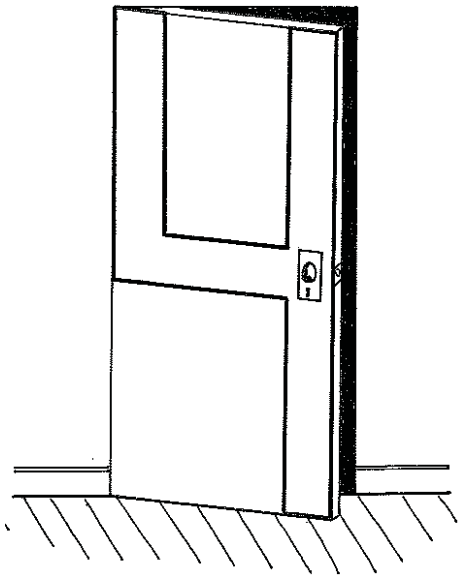
**2 – SHOE**



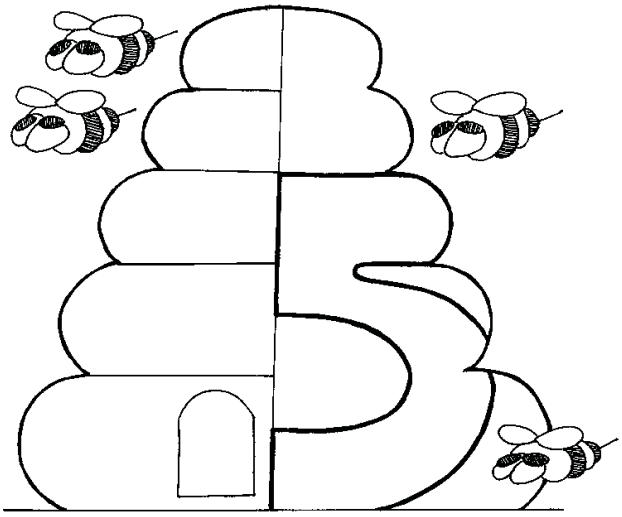
**3 – TREE**



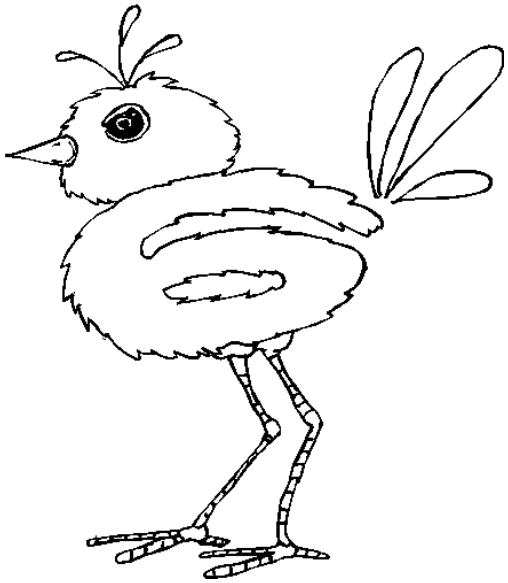
**4 – DOOR**



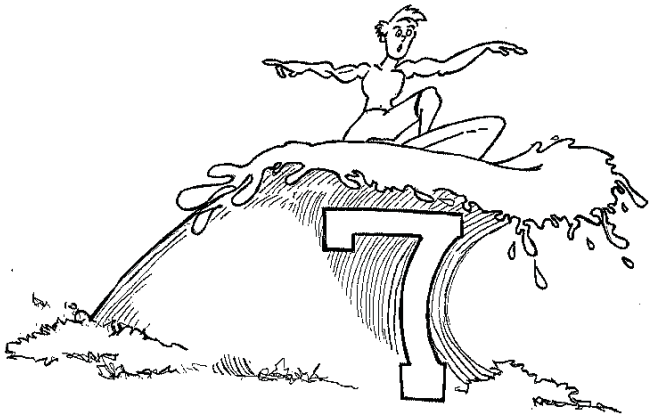
**5 – HIVE**



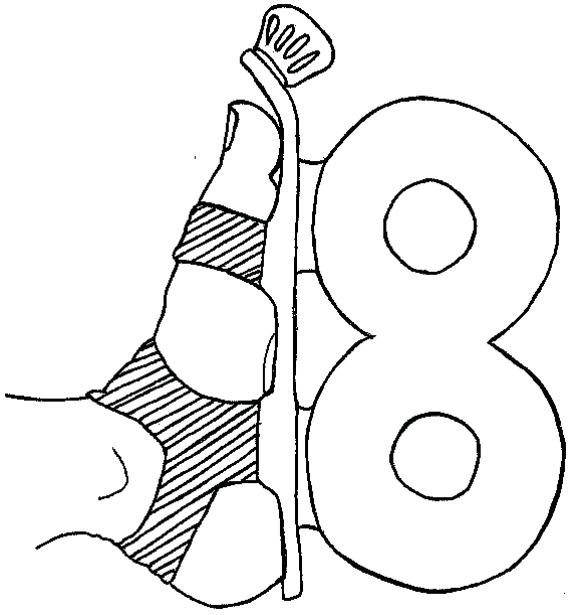
**6 – CHICK**



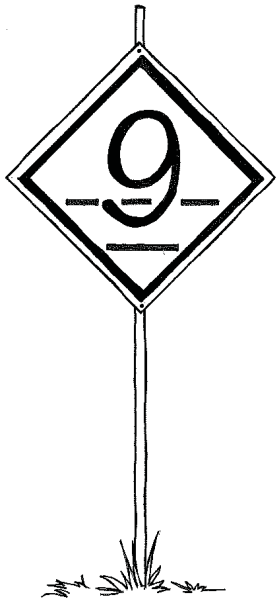
**7– SURFIN'**



**8 – SKATE**



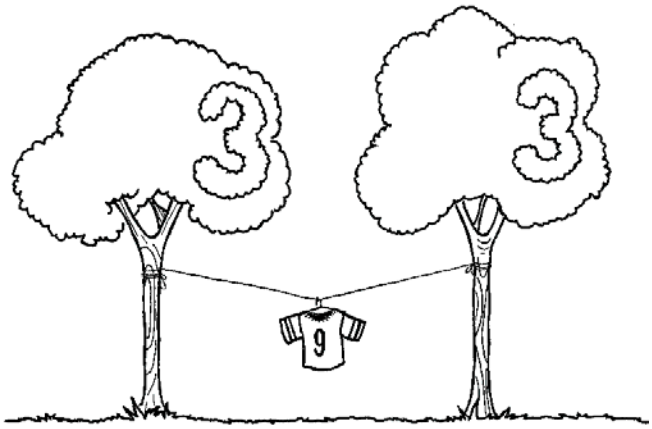
**9 – SIGN**



# 3 x 3 = 9

Name _____ Date _____

## PICTURE




**3 x 3 = 9**

**Tree x Tree = Line**

## STORY

There was a boy who loved to play football with his friends. His parents knew how much he enjoyed football, so they gave him a new football jersey with the number 9 on it. One day he was playing football with his friends. While he was trying to catch a pass, he slipped and fell into a puddle of water. The jersey was soaking wet, so he tied a rope between two trees and hung the jersey up to dry. From one TREE (3) to the other TREE (3), the jersey hung on the LINE (9).

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 3 x 3 | 2) 2 x 6 | 3) 9 x 9 | 4) 7 x 5 | 5) 9 x 7 |
| 6) 5 x 8 | 7) 8 x 9 | 8) 0 x 4 | 9) 3 x 3 | 10) 9 x 6 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 5 x 9 =___ | 12) 3 x 3 =___ | 13) 6 x 5 =___ |
| 14) 2 x 4 =___ | 15) 9 x 4 =___ | 16) 2 x 7 =___ |
| 17) 5 x 9 =___ | 18) 3 x 3 =___ | 19) 4 x 5 =___ |
| 20) 3 x 5 =___ | 21) 0 x 6 =___ | 22) 3 x 9 =___ |

## CONNECT

Draw a line from the problem to the answer.

| | | |
|---|---|---|
| 3 x 3 | 63 | 8 x 5 |
| 6 x 9 | 72 | 9 x 9 |
| 9 x 8 | 81 | 5 x 7 |
| 5 x 9 | 40 | 9 x 7 |
| 9 x 4 | 9 | 5 x 5 |
| 5 x 8 | 25 | 9 x 5 |
| 9 x 9 | 35 | 1 x 9 |
| 7 x 5 | 54 | 4 x 4 |
| 5 x 5 | 45 | 9 x 6 |
| 7 x 9 | 36 | 8 x 9 |

# 3 x 3 = 9

Name _____ Date _____

## PICTURE

Draw your own picture for 3 x 3 = 9.

**3 x 3 = 9**

**Tree x _____ = _____**

## STORY

In your own words, write the story that helps you remember 3 x 3 = 9.

## PROBLEM

Three tricycles were parked in front of the candy store. How many wheels were there? (In words and pictures, show your thinking.)

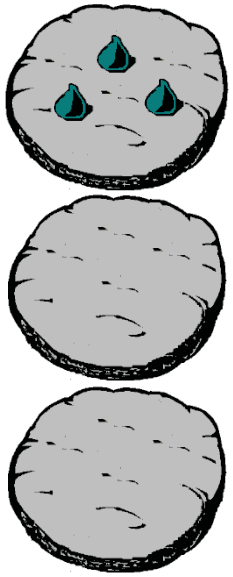
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 3 x 3 = 9.

## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact. *(The first cookie is done for you.)*

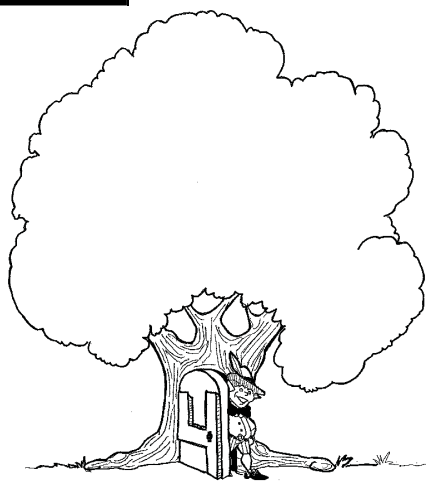
**3 x 3 = 9 (3 sets of 3 = 9)**



# 3 x 4 = 12

Name _____ Date _____

## PICTURE



**3 x 4 = 12**

**Tree x Door = Elf**

## STORY

Once there was a homeless elf who loved the forest. All day he would wander and play among the tall trees. At night he would lie under the stars and the trees he loved so well. Sometimes he would get cold and wet. He needed a shelter. One day he thought of a great solution. He found a big hollow TREE (3), added a little DOOR (4), and had a cozy ELF (12) home.

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 4 x 3 | 2) 5 x 5 | 3) 5 x 9 | 4) 3 x 3 | 5) 8 x 2 |
| 6) 7 x 9 | 7) 9 x 3 | 8) 3 x 4 | 9) 8 x 5 | 10) 9 x 9 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 4 x 9 =___ | 12) 5 x 3 =___ | 13) 7 x 5 =___ |
| 14) 3 x 3 =___ | 15) 4 x 3 =___ | 16) 9 x 8 =___ |
| 17) 4 x 5 =___ | 18) 2 x 7 =___ | 19) 5 x 6 =___ |
| 20) 6 x 9 =___ | 21) 2 x 6 =___ | 22) 3 x 4 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 3 x 4 | 63 | 9 x 9 |
| 8 x 9 | 45 | 4 x 0 |
| 5 x 9 | 8 | 6 x 9 |
| 8 x 5 | 12 | 1 x 8 |
| 3 x 3 | 54 | 3 x 3 |
| 9 x 9 | 40 | 9 x 5 |
| 9 x 6 | 72 | 7 x 9 |
| 0 x 4 | 81 | 4 x 3 |
| 9 x 7 | 9 | 9 x 8 |
| 2 x 4 | 0 | 5 x 8 |

# 3 x 4 = 12

Name _____ Date _____

## PICTURE

Draw your own picture for 3 x 4 = 12.

**3 x 4 = 12**

**_____ x Door = _____**

## STORY

In your own words, write the story that helps you remember 3 x 4 = 12.

## PROBLEM

In the parade were 3 horses. How many legs are there on all the horses? (In words and pictures, show your thinking.)

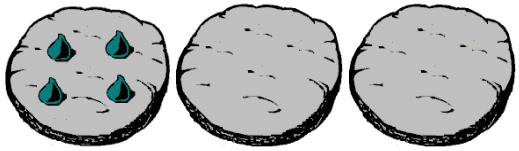
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 3 x 4 = 12.

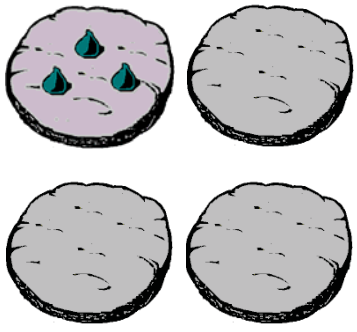
## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact. *(The first cookie is done for your.)*

**3 x 4 = 12 (3 sets of 4 = 12)**



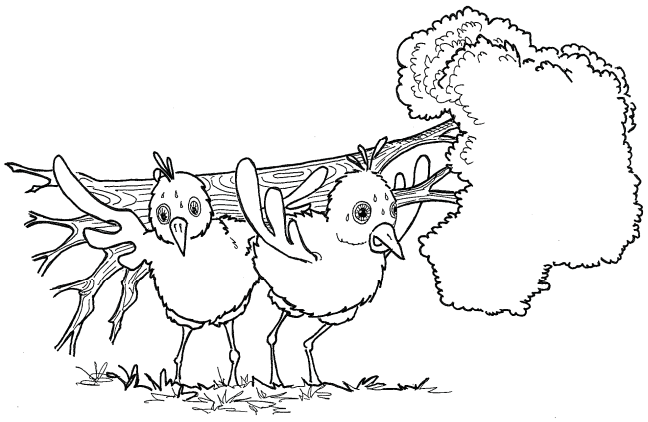
**4 x 3 = 12 (4 sets of 3 = 12)**



# 3 x 6 = 18

Name _____ Date _____

## PICTURE



**3 x 6 = 18**

**Tree x Chicks = Aching**

## STORY

One day a storm blew down a big tree right in the middle of a farm. The little chicks were frightened and ran away, but the strongest and bravest chicks came up with a plan. The strong chicks lifted the heavy tree and moved it out of the yard. The CHICKS (6) moved the TREE (3), but their backs were ACHING (18) when they finished.

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 6 x 3 | 2) 9 x 3 | 3) 3 x 4 | 4) 5 x 8 | 5) 7 x 9 |
| 6) 3 x 3 | 7) 6 x 5 | 8) 4 x 9 | 9) 3 x 6 | 10) 5 x 3 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 5 x 4 =___ | 12) 9 x 5 =___ | 13) 5 x 5 =___ |
| 14) 6 x 9 =___ | 15) 6 x 3 =___ | 16) 9 x 8 =___ |
| 17) 4 x 3 =___ | 18) 2 x 5 =___ | 19) 8 x 5 =___ |
| 20) 9 x 9 =___ | 21) 5 x 7 =___ | 22) 3 x 3 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 5 x 8 | 81 | 2 x 6 |
| 3 x 6 | 16 | 7 x 9 |
| 8 x 2 | 18 | 1 x 9 |
| 9 x 9 | 35 | 2 x 4 |
| 5 x 9 | 8 | 8 x 5 |
| 3 x 4 | 12 | 9 x 5 |
| 9 x 7 | 63 | 9 x 9 |
| 4 x 2 | 40 | 6 x 3 |
| 3 x 3 | 45 | 2 x 8 |
| 7 x 5 | 9 | 5 x 7 |

# 3 x 6 = 18

Name _____ Date _____

## PICTURE

Draw your own picture for 3 x 6 = 18.

**3 x 6 = 18**

**_____ x Chicks = _____**

## STORY

In your own words, write the story that helps you remember 3 x 6 = 18.

## PROBLEM

Six clowns were each juggling three balls. How many balls is that? (In words and pictures, show your thinking.)

## PRACTICE

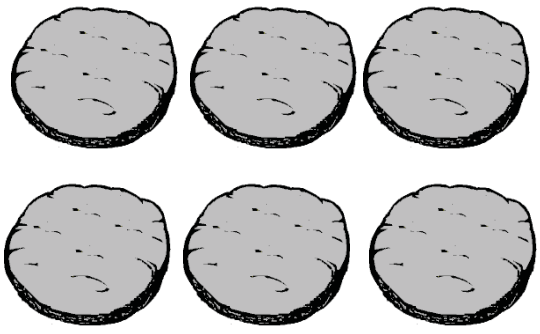
In the space below, write a story problem that is based on the multiplication fact 3 x 6 = 18.

## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**3 x 6 = 18 (3 sets of 6 = 18)**

**6 x 3 = 18 (6 sets of 3 = 18)**



# 3 x 7 = 21

Name _____ Date _____

## PICTURE

**3 x 7 = 21**

**Tree x Surfin' = Denty Sun**

## STORY

A huge tree grew near the ocean. Each day, the tree watched the surfers and longed to try surfing. One day the tree pulled up his roots, walked down to the beach, and rented a surf board. The tree had a wonderful day surfing. Suddenly, a big wave lifted the surfing tree so high it bumped into the sun. The SURFIN' (7) TREE (3) crashed into the sun so hard it made a DENTY SUN (21).

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 3 x 6 | 2) 9 x 7 | 3) 5 x 8 | 4) 3 x 7 | 5) 5 x 2 |
| 6) 7 x 3 | 7) 3 x 5 | 8) 4 x 3 | 9) 9 x 4 | 10) 5 x 6 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 3 x 3 = ___ | 12) 2 x 8 = ___ | 13) 6 x 3 = ___ |
| 14) 6 x 9 = ___ | 15) 3 x 7 = ___ | 16) 8 x 9 = ___ |
| 17) 4 x 5 = ___ | 18) 7 x 5 = ___ | 19) 9 x 3 = ___ |
| 20) 9 x 9 = ___ | 21) 5 x 9 = ___ | 22) 3 x 4 = ___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 5 x 5 | 21 | 3 x 3 |
| 2 x 7 | 35 | 6 x 3 |
| 3 x 7 | 20 | 8 x 9 |
| 7 x 5 | 25 | 9 x 6 |
| 6 x 9 | 18 | 5 x 7 |
| 4 x 3 | 12 | 7 x 3 |
| 9 x 8 | 54 | 5 x 4 |
| 4 x 5 | 9 | 7 x 2 |
| 3 x 6 | 14 | 3 x 4 |
| 3 x 3 | 72 | 5 x 5 |

# 3 x 7 = 21

Name _____ Date _____

## PICTURE

Draw your own picture for 3 x 7 = 21.

**3 x 7 = 21**

**Tree x _____ = _____**

## STORY

In your own words, write the story that helps you remember 3 x 7 = 21.

## PROBLEM

Three boys each had seven dollars. How much money did they have all together? (In words and pictures, show your thinking.)

## PRACTICE

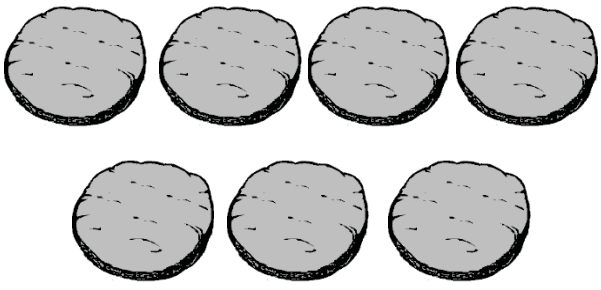
In the space below, write a story problem that is based on the multiplication fact 3 x 7 = 21.

## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**3 x 7 = 21 (3 sets of 7 = 21)**

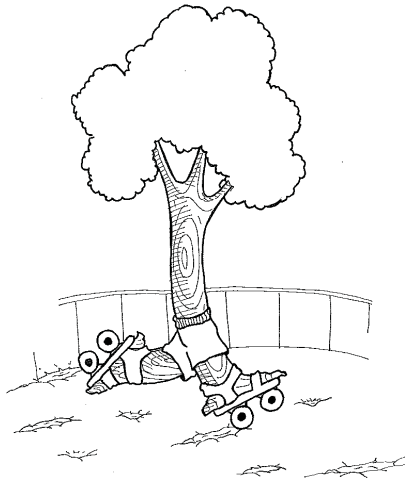
**7 x 3 = 21 (7 sets of 3 = 21)**



# 3 x 8 = 24

Name _____ Date _____

## PICTURE



**3 x 8 = 24**

**Tree x Skate = Denty Floor**

## STORY

For many years an old tree stood in a park watching the kids play. He loved to watch the children skate around the outdoor roller rink. One day he decided to have some fun too. He put on skates and zoomed around the rink. When the kids saw what the heavy tree was doing to the floor, they told him to stop. The TREE (3) on SKATES (8) was making a DENTY FLOOR (24).

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 3 x 7 | 2) 7 x 9 | 3) 9 x 2 | 4) 8 x 3 | 5) 5 x 8 |
| 6) 8 x 3 | 7) 5 x 8 | 8) 3 x 6 | 9) 6 x 9 | 10) 3 x 4 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 3 x 3 = ___ | 12) 5 x 9 = ___ | 13) 7 x 3 = ___ |
| 14) 8 x 9 = ___ | 15) 9 x 3 = ___ | 16) 4 x 9 = ___ |
| 17) 6 x 5 = ___ | 18) 3 x 8 = ___ | 19) 5 x 4 = ___ |
| 20) 9 x 9 = ___ | 21) 5 x 5 = ___ | 22) 6 x 3 = ___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 3 x 4 | 18 | 7 x 3 |
| 9 x 8 | 72 | 9 x 9 |
| 8 x 3 | 35 | 3 x 6 |
| 3 x 3 | 27 | 8 x 9 |
| 5 x 5 | 24 | 5 x 7 |
| 3 x 7 | 25 | 4 x 3 |
| 7 x 5 | 12 | 3 x 8 |
| 3 x 9 | 81 | 9 x 3 |
| 6 x 3 | 21 | 3 x 3 |
| 9 x 9 | 9 | 5 x 5 |

# 3 x 8 = 24

Name _____ Date _____

## PICTURE

Draw your own picture for 3 x 8 = 24.

**3 x 8 = 24**

**_____ x Skate = _____**

## STORY

In your own words, write the story that helps you remember 3 x 8 = 24.

## PROBLEM

In the aquarium tank were three octopuses (or octopi). How many total legs? (In words and pictures, show your thinking.)

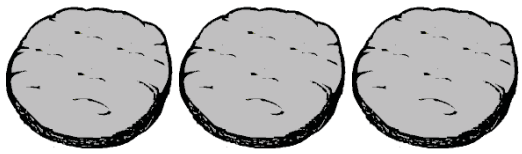
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 3 x 8 = 24.

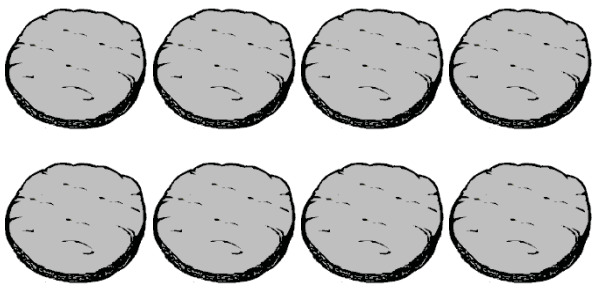
## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**3 x 8 = 24 (3 sets of 8 = 24)**



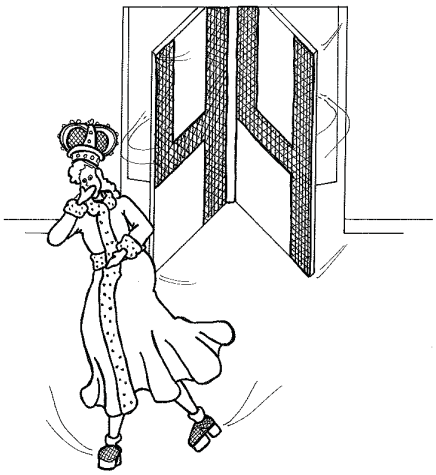
**8 x 3 = 24 (8 sets of 3 = 24)**



# 4 x 4 = 16

Name _____ Date _____

## PICTURE



**4 x 4 = 16**

**Door x Door = Sick Queen**

## STORY

A queen was invited to a queenly ball at a fancy hotel in a big city. The queen had never been to a big city, and when she got to the hotel, she was amazed to see doors that went around in a circle. She had never seen revolving doors. She pushed on the doors. "Whoopee!" she said to herself as she went around and around. When the dizzy queen finally stepped out from between one DOOR (4) and the other DOOR (4) she was a very SICK QUEEN 16).

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 7 x 3 | 2) 4 x 4 | 3) 5 x 8 | 4) 9 x 7 | 5) 8 x 3 |
| 6) 5 x 9 | 7) 3 x 3 | 8) 3 x 6 | 9) 5 x 4 | 10) 4 x 9 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 5 x 6 =___ | 12) 3 x 7 =___ | 13) 9 x 9 =___ |
| 14) 5 x 5 =___ | 15) 7 x 5 =___ | 16) 4 x 4 =___ |
| 17) 4 x 4 =___ | 18) 9 x 8 =___ | 19) 6 x 9 =___ |
| 20) 3 x 9 =___ | 21) 4 x 3 =___ | 22) 3 x 8 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 5 x 7 | 18 | 4 x 4 |
| 9 x 9 | 40 | 7 x 3 |
| 8 x 3 | 16 | 9 x 6 |
| 3 x 6 | 54 | 7 x 5 |
| 8 x 9 | 21 | 9 x 8 |
| 4 x 4 | 81 | 3 x 8 |
| 6 x 9 | 24 | 8 x 5 |
| 3 x 7 | 36 | 6 x 3 |
| 4 x 9 | 35 | 9 x 4 |
| 5 x 8 | 72 | 9 x 9 |

# 4 x 4 = 16

Name _____ Date _____

## PICTURE

Draw your own picture for 4 x 4 = 16.

**4 x 4 = 16**

**Door x _____ = _____**

## STORY

In your own words, write the story that helps you remember 4 x 4 = 16.

## PROBLEM

The building had four doors with four windows in each door. How many total windows? (In words and pictures, show your thinking.)

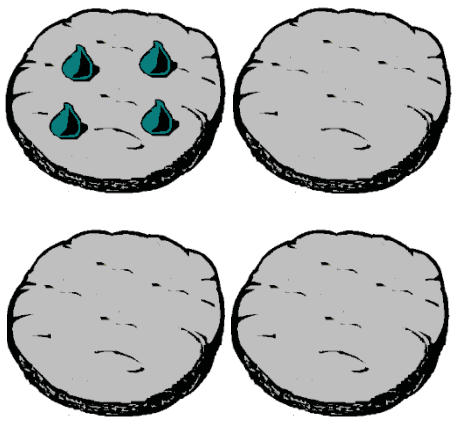
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 4 x 4 = 16.

## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact. *(The first cookie is done for you.)*

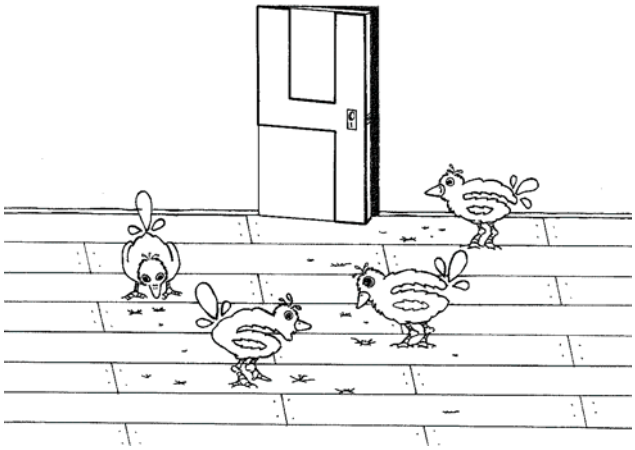
**4 x 4 = 16 (4 sets of 4 = 16)**



# 4 x 6 = 24

Name _____ Date _____

## PICTURE



**4 x 6 = 24**

**Door x Chicks = Denty Floor**

## STORY

One cold day on a farm, the ground was covered with snow and the chicks could not find food. They became very hungry. While looking for food, they noticed the farmer had left the door of the house open. The chicks walked in and found crumbs of food on the floor. Their beaks made tiny dents in the floor when they pecked at the food. The CHICKS (6) who wandered in through the DOOR (4) had made a DENTY FLOOR (24).

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 3 x 7 | 2) 4 x 6 | 3) 9 x 7 | 4) 4 x 4 | 5) 5 x 5 |
| 6) 3 x 9 | 7) 6 x 3 | 8) 3 x 3 | 9) 5 x 9 | 10) 3 x 8 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 7 x 5 =___ | 12) 6 x 4 =___ | 13) 9 x 9 =___ |
| 14) 3 x 4 =___ | 15) 9 x 6 =___ | 16) 5 x 6 =___ |
| 17) 8 x 5 =___ | 18) 8 x 3 =___ | 19) 4 x 4 =___ |
| 20) 4 x 6 =___ | 21) 9 x 4 =___ | 22) 8 x 9 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 4 x 6 | 12 | 2 x 8 |
| 7 x 3 | 25 | 9 x 1 |
| 2 x 6 | 16 | 9 x 9 |
| 3 x 3 | 72 | 8 x 9 |
| 9 x 9 | 21 | 5 x 5 |
| 6 x 3 | 24 | 3 x 4 |
| 4 x 4 | 18 | 6 x 4 |
| 5 x 5 | 81 | 9 x 3 |
| 3 x 9 | 9 | 9 x 2 |
| 9 x 8 | 27 | 3 x 7 |

# 4 x 6 = 24

Name _____ Date _____

## PICTURE

Draw your own picture for 4 x 6 = 24.

**4 x 6 = 24**

**Door x _____ = _____**

## STORY

In your own words, write the story that helps you remember 4 x 6 = 24.

## PROBLEM

The man stacked four six-packs of cola on the table. How many cans of cola? (In words and pictures, show your thinking.)

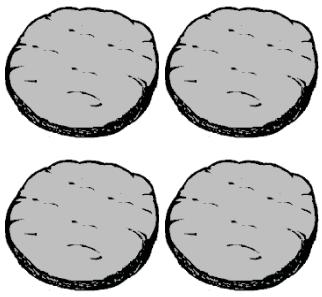
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 4 x 6 = 24.

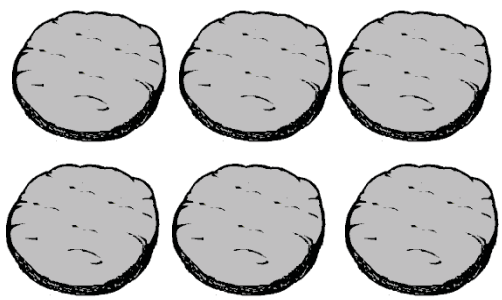
## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**4 x 6 = 24 (4 sets of 6 = 24)**



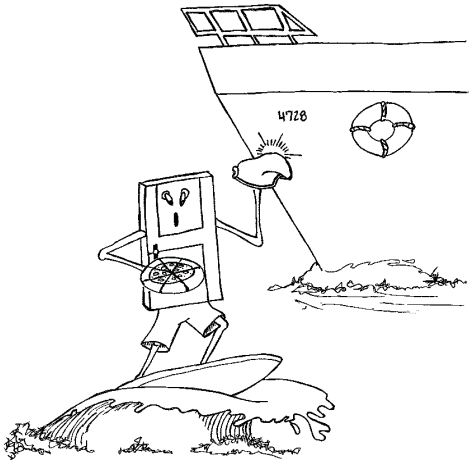
**6 x 4 = 24 (6 sets of 4 = 24)**



# 4 x 7 = 28

Name _____ Date _____

## PICTURE



**4 x 7 = 28**

**Door x Surfin' = Denty Plate**

## STORY

There was a door who lived by the ocean and loved to surf. He found a job delivering pizzas to the boats on the waterfront. When an order for pizza came in, he would ride the waves and deliver the pizza on a shiny metal plate. When he arrived at the boat, he often had trouble stopping. Time after time he would bang into the side of the boat and dent the pizza plate. The DOOR (4) who was SURFIN' (7) would end up with a DENTY PLATE (28).

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 3 x 8 | 2) 7 x 9 | 3) 4 x 7 | 4) 6 x 3 | 5) 5 x 8 |
| 6) 6 x 4 | 7) 4 x 3 | 8) 8 x 9 | 9) 4 x 4 | 10) 5 x 5 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 7 x 4 =___ | 12) 9 x 3 =___ | 13) 4 x 4 =___ |
| 14) 9 x 9 =___ | 15) 3 x 7 =___ | 16) 9 x 5 =___ |
| 17) 4 x 6 =___ | 18) 7 x 5 =___ | 19) 4 x 7 =___ |
| 20) 6 x 5 =___ | 21) 3 x 3 =___ | 22) 6 x 9 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 8 x 9 | 16 | 3 x 6 |
| 7 x 4 | 9 | 8 x 3 |
| 3 x 7 | 24 | 3 x 4 |
| 6 x 2 | 72 | 9 x 9 |
| 4 x 6 | 18 | 9 x 7 |
| 3 x 3 | 21 | 4 x 7 |
| 8 x 2 | 12 | 7 x 3 |
| 9 x 9 | 81 | 3 x 3 |
| 7 x 9 | 28 | 9 x 8 |
| 2 x 9 | 63 | 4 x 4 |

**PICTURE** **STORY**

**4 x 7 = 28** Name _____ Date _____

Draw your own picture for 4 x 7 = 28.

**4 x 7 = 28**

**_____ x Surfin' = _____**

In your own words, write the story that helps you remember 4 x 7 = 28.

**PROBLEM**

It is exactly four weeks until vacation. How many days is that? (In words and pictures, show your thinking.)

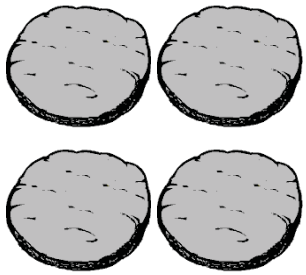
**PRACTICE**

In the space below, write a story problem that is based on the multiplication fact 4 x 7 = 28.

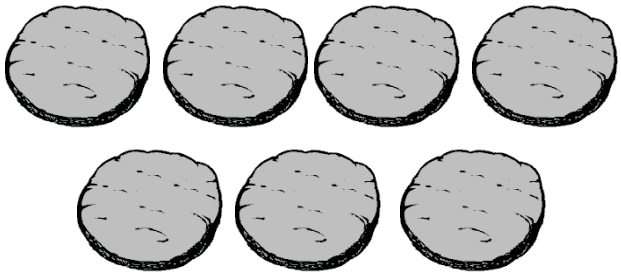
**CONCEPT**

Add chocolate chips to the cookies below to represent the multiplication fact.

**4 x 7 = 28 (4 sets of 7 = 28)**



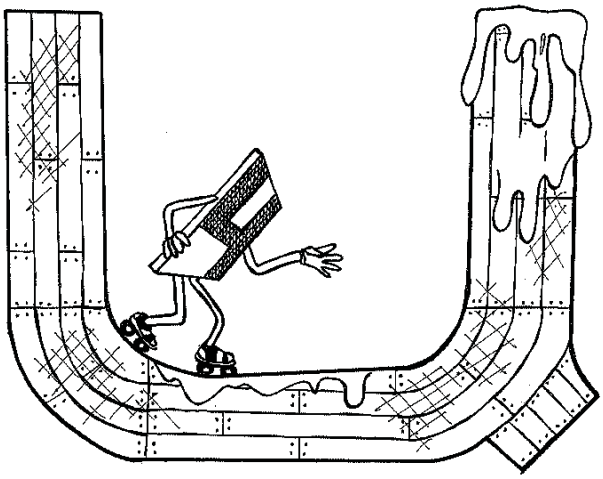
**7 x 4 = 28 (7 sets of 4 = 28)**



# 4 x 8 = 32

Name _____ Date _____

## PICTURE



**4 x 8 = 32**

**Door x Skate = Dirty U**

## Story

One day the door was skating by an old pile of dirty wood when he had a great idea. He took the dirty wood and built a huge ramp shaped like a U. The door called his ramp the dirty U because it was made of dirty wood. He loved skating up and down the sides of the U. The DOOR (4) on SKATES (8) did all kinds of fancy tricks on the DIRTY U (32).

## Practice 1

| | | | | |
|---|---|---|---|---|
| 1) 6 x 3 | 2) 4 x 8 | 3) 3 x 3 | 4) 4 x 4 | 5) 7 x 4 |
| 6) 4 x 6 | 7) 8 x 3 | 8) 9 x 7 | 9) 8 x 4 | 10) 5 x 9 |

## Practice 2

| | | |
|---|---|---|
| 11) 3 x 4 =___ | 12) 4 x 9 =___ | 13) 3 x 7 =___ |
| 14) 5 x 7 =___ | 15) 4 x 8 =___ | 16) 9 x 7 =___ |
| 17) 6 x 4 =___ | 18) 9 x 3 =___ | 19) 6 x 9 =___ |
| 20) 9 x 9 =___ | 21) 5 x 5 =___ | 22) 4 x 7 =___ |

## Connect

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 7 x 3 | 24 | 7 x 4 |
| 8 x 4 | 16 | 2 x 9 |
| 3 x 6 | 72 | 3 x 3 |
| 4 x 4 | 32 | 4 x 5 |
| 9 x 8 | 12 | 6 x 4 |
| 4 x 7 | 9 | 4 x 8 |
| 5 x 4 | 21 | 8 x 2 |
| 8 x 3 | 18 | 8 x 9 |
| 3 x 4 | 28 | 6 x 2 |
| 3 x 3 | 20 | 3 x 7 |

# 4 x 8 = 32

Name _____ Date _____

## PICTURE

Draw your own picture for 4 x 8 = 32.

**4 x 8 = 32**

**_____ x Skate = _____**

## STORY

In your own words, write the story that helps you remember 4 x 8 = 32.

## PROBLEM

Four eight-sided stop signs were sitting in a warehouse. How many total sides? (In words and pictures, show your thinking.)

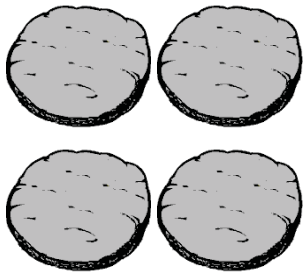
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 4 x 8 = 32.

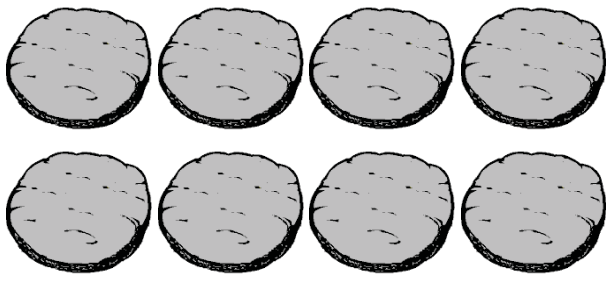
## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**4 x 8 = 32 (4 sets of 8 = 32)**



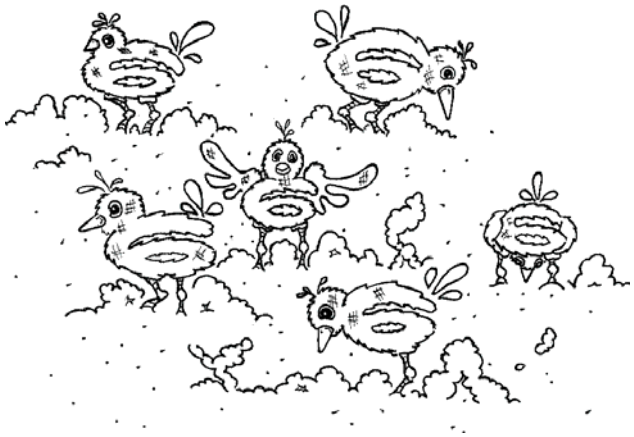
**8 x 4 = 32 (8 sets of 4 = 32)**



# 6 x 6 = 36

Name _____ Date _____

## PICTURE



**6 x 6= 36**

**Chicks x Chicks = Dirty Chicks**

## STORY

Some little chicks hated taking a bath. Every night when their mom called them for their bath, they were nowhere to be found. As the days went by, the chicks became dirtier and dirtier. Soon, everyone heard about those dirty chicks. People shook their heads and said, "CHICKS (6), CHICKS (6), DIRTY CHICKS (36)."

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 6 x 6 | 2) 5 x 9 | 3) 7 x 4 | 4) 3 x 8 | 5) 4 x 4 |
| 6) 4 x 8 | 7) 9 x 4 | 8) 4 x 3 | 9) 6 x 4 | 10) 3 x 3 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 9 x 9 =___ | 12) 6 x 6 =___ | 13) 3 x 9 =___ |
| 14) 3 x 6 =___ | 15) 9 x 6 =___ | 16) 8 x 4 =___ |
| 17) 4 x 7 =___ | 18) 6 x 4 =___ | 19) 9 x 8 =___ |
| 20) 7 x 9 =___ | 21) 3 x 7 =___ | 22) 6 x 6 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 5 x 0 | 16 | 4 x 9 |
| 8 x 4 | 8 | 4 x 4 |
| 4 x 6 | 32 | 7 x 4 |
| 6 x 6 | 28 | 5 x 5 |
| 3 x 7 | 18 | 0 x 3 |
| 5 x 5 | 24 | 9 x 2 |
| 1 x 8 | 36 | 8 x 3 |
| 4 x 7 | 21 | 2 x 4 |
| 2 x 8 | 0 | 4 x 8 |
| 6 x 3 | 25 | 7 x 3 |

# 6 x 6 = 36

Name _____ Date _____

## PICTURE

Draw your own picture for 6 x 6 = 36.

**6 x 6 = 36**

**Door x _____ = _____**

## STORY

In your own words, write the story that helps you remember 6 x 6 = 36.

## PROBLEM

Six lady bugs were munching on a leaf. How many legs on all six lady bugs? (In words and pictures, show your thinking.)

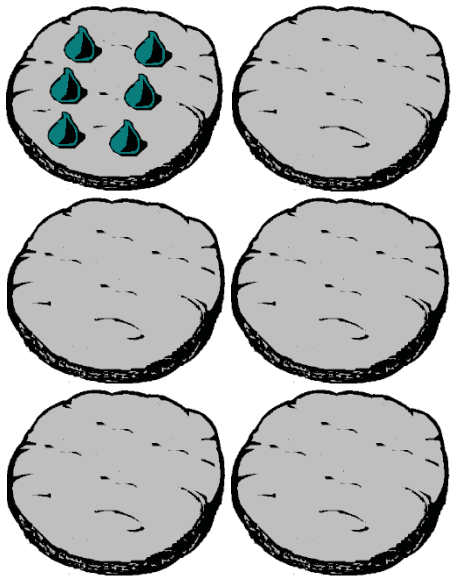
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 6 x 6 = 36.

## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact. *(The first cookie is done for you.)*

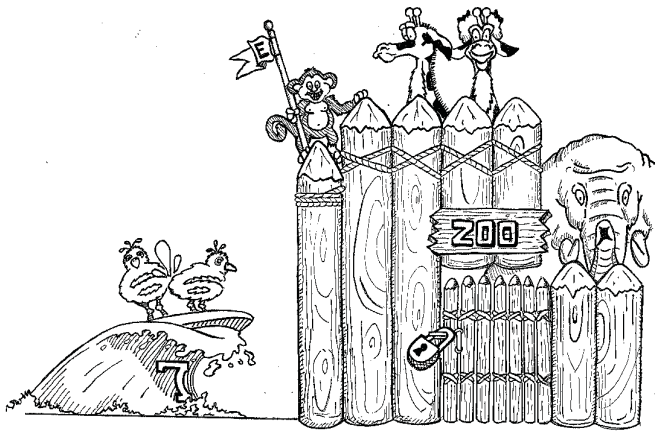
**6 x 6 = 36 (6 sets of 6 = 36)**



# 6 x 7 = 42

Name _____ Date _____

## PICTURE




**6 x 7 = 42**

**Chicks x Surfin' = Fort E Zoo**

## STORY

The only way the mother hen could get her little chicks to take a bath was to let them go surfing. The chicks loved to surf. One day the chicks decided to surf on over to the nearby Fort E. As they surfed closer, they became very excited. A traveling zoo was staying in Fort E for a few days. As the CHICKS (6) came SURFIN (7) up to the FORT E ZOO (42), they could see many of the animals peeking over the fence.

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 6 x 6 | 2) 3 x 8 | 3) 4 x 7 | 4) 3 x 3 | 5) 7 x 6 |
| 6) 8 x 4 | 7) 3 x 9 | 8) 9 x 9 | 9) 5 x 4 | 10) 7 x 9 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 4 x 6 =___ | 12) 9 x 4 =___ | 13) 4 x 4 =___ |
| 14) 6 x 7 =___ | 15) 5 x 8 =___ | 16) 6 x 6 =___ |
| 17) 3 x 4 =___ | 18) 3 x 7 =___ | 19) 4 x 8 =___ |
| 20) 3 x 6 =___ | 21) 7 x 6 =___ | 22) 5 x 2 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 9 x 8 | 14 | 5 x 6 |
| 7 x 5 | 72 | 9 x 5 |
| 3 x 5 | 30 | 6 x 3 |
| 9 x 2 | 35 | 2 x 7 |
| 6 x 9 | 45 | 7 x 6 |
| 7 x 2 | 15 | 5 x 7 |
| 6 x 5 | 16 | 6 x 9 |
| 5 x 9 | 18 | 3 x 5 |
| 2 x 8 | 42 | 8 x 9 |
| 6 x 7 | 54 | 4 x 4 |

# 6 x 7 = 42

Name _____ Date _____

## PICTURE

Draw your own picture for 6 x 7 = 42.

**6 x 7 = 42**

**_____ x Surfin' = _____**

## STORY

In your own words, write the story that helps you remember 6 x 7 = 42.

## PROBLEM

Seven six-legged bugs were sitting on a lily pad. How many legs are on all the bugs? (In words and pictures, show your thinking.)

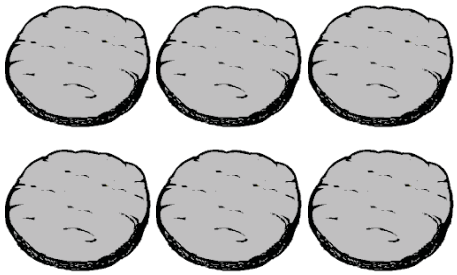
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 6 x 7 = 42.

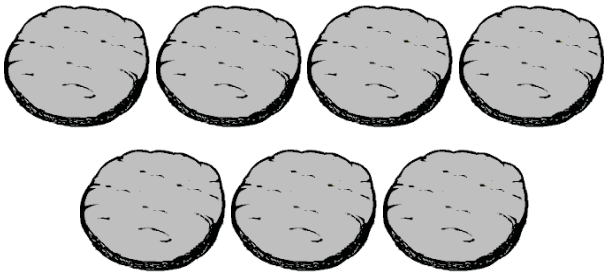
## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**6 x 7 = 42 (6 sets of 7 = 42)**



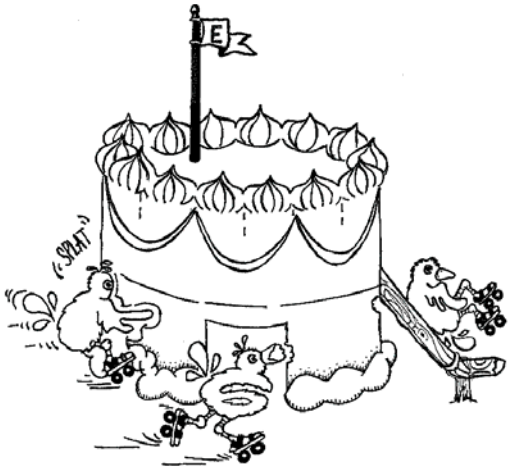
**7 x 6 = 42 (7 sets of 6 = 42)**



# 6 x 8 = 48

Name _____ Date _____

## PICTURE




# 6 x 8 = 48

## Chicks x Skate = Fort E Cake

## STORY

There was a surprise for the chicks when they arrived home. Their mother was so happy they were clean, she had baked them a cake. The cake was decorated like Fort E. One of the chicks thought of a fun way to eat the Fort E cake. The other chicks jumped up and down when they heard the idea. The chicks put on their skates, raced by the cake, and took a bite with their beaks. Some of the CHICKS (6) weren't too good on SKATES (8), so they crashed right into the FORT E CAKE (48). Splat!

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 4 x 8 | 2) 9 x 8 | 3) 6 x 8 | 4) 7 x 2 | 5) 6 x 3 |
| 6) 7 x 6 | 7) 4 x 9 | 8) 5 x 8 | 9) 9 x 6 | 10) 6 x 6 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 4 x 4 =___ | 12) 8 x 6 =___ | 13) 7 x 5 =___ |
| 14) 7 x 3 =___ | 15) 3 x 3 =___ | 16) 6 x 7 =___ |
| 17) 6 x 6 =___ | 18) 5 x 9 =___ | 19) 3 x 5 =___ |
| 20) 4 x 5 =___ | 21) 8 x 6 =___ | 22) 8 x 2 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 2 x 6 | 28 | 6 x 5 |
| 6 x 8 | 12 | 9 x 3 |
| 9 x 7 | 24 | 3 x 2 |
| 7 x 4 | 27 | 9 x 9 |
| 4 x 3 | 63 | 8 x 3 |
| 3 x 8 | 12 | 3 x 4 |
| 9 x 9 | 6 | 4 x 7 |
| 2 x 3 | 48 | 9 x 7 |
| 3 x 9 | 81 | 8 x 6 |
| 5 x 6 | 30 | 6 x 2 |

# 6 x 8 = 48

Name _____ Date _____

## PICTURE

Draw your own picture for 6 x 8 = 48.

**6 x 8 = 48**

**Chicks x _____ = _____**

## STORY

In your own words, write the story that helps you remember 6 x 8 = 48.

## PROBLEM

Eight children were each given six pieces of candy. How many total pieces of candy? (In words and pictures, show your thinking.)

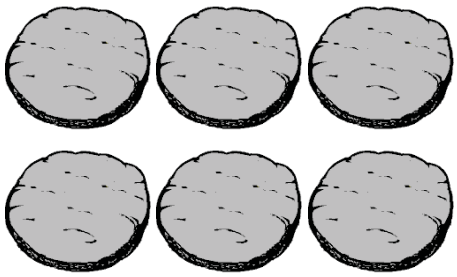
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 6 x 8 = 48.

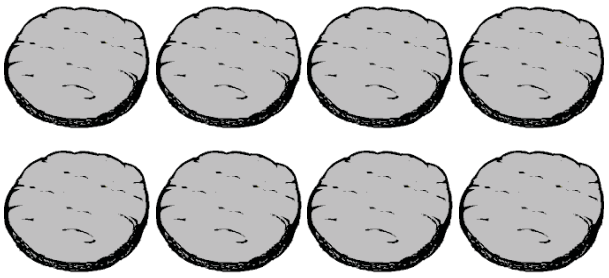
## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**6 x 8 = 48 (6 sets of 8 = 48)**



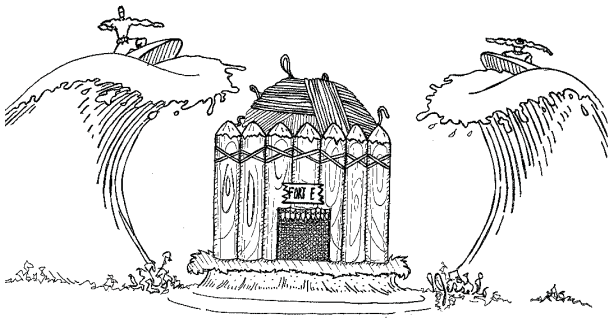
**8 x 6 = 48 (8 sets of 6 = 48)**



# 7 x 7 = 49

Name _____ Date _____

## PICTURE




**7 x 7 = 49**

**Surfin' x Surfin' = Fort E Twine**

## STORY

After the zoo animals left Fort E, the people in the fort by the sea had a crazy idea. They decided to try and get into the *Book of World Records* and be famous. Because they had a lot of twine left over from tying all their logs together, they decided to make the world's largest ball of twine. The ball of twine got larger and larger. Soon it was so big, surfers could see the ball of twine over the top of the fort wall. People SURFIN' (7) on one side and people SURFIN' (7) on the other side would yell, "Look at the FORT E TWINE (49)!"

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 4 x 4 | 2) 9 x 7 | 3) 6 x 8 | 4) 9 x 3 | 5) 7 x 7 |
| 6) 6 x 7 | 7) 3 x 4 | 8) 8 x 5 | 9) 4 x 7 | 10) 2 x 2 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 9 x 5 =___ | 12) 3 x 8 =___ | 13) 3 x 7 =___ |
| 14) 7 x 7 =___ | 15) 6 x 9 =___ | 16) 5 x 4 =___ |
| 17) 6 x 5 =___ | 18) 4 x 8 =___ | 19) 8 x 6 =___ |
| 20) 7 x 6 =___ | 21) 3 x 5 =___ | 22) 2 x 7 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 7 x 7 | 81 | 8 x 9 |
| 3 x 3 | 9 | 9 x 1 |
| 6 x 6 | 24 | 2 x 9 |
| 9 x 9 | 72 | 1 x 5 |
| 5 x 7 | 49 | 9 x 9 |
| 4 x 6 | 18 | 5 x 5 |
| 6 x 3 | 35 | 7 x 7 |
| 9 x 8 | 5 | 9 x 4 |
| 5 x 1 | 25 | 5 x 7 |
| 5 x 5 | 36 | 6 x 4 |

# 7 x 7 = 49

Name _____ Date _____

## PICTURE

Draw your own picture for 7 x 7 = 49.

**7 x 7 = 49**

**_____ x Surfin' =**

**_____**

## STORY

In your own words, write the story that helps you remember 7 x 7 = 49.

## PROBLEM

There are exactly seven weeks until vacation. How many days is that? (In words and pictures, show your thinking.)

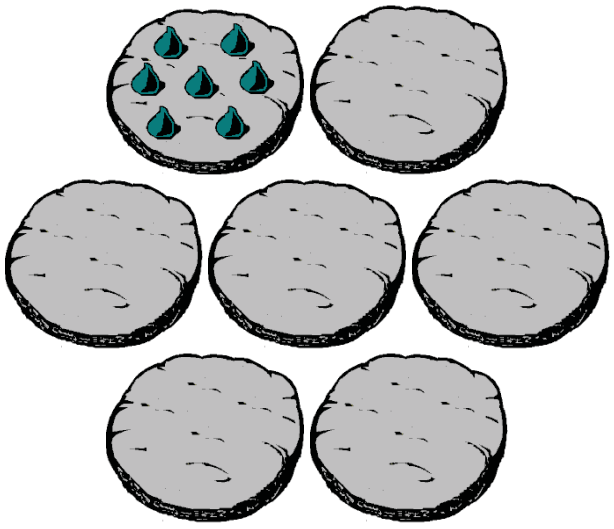
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 7 x 7 = 49.

## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact. *(The first cookie is done for you.)*

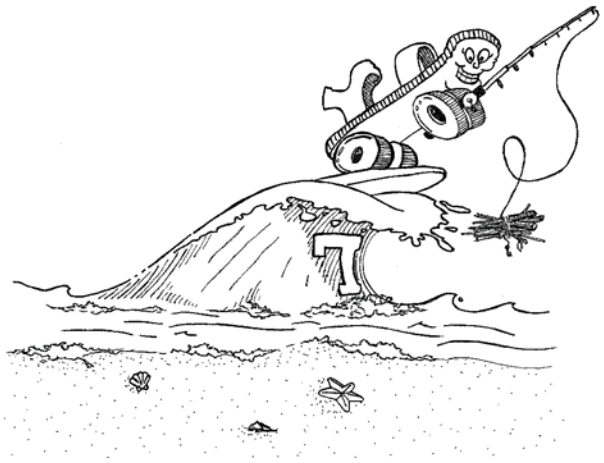
**7 x 7 = 49 (7 sets of 7 = 49)**



# 7 x 8 = 56

Name _____ Date _____

## PICTURE



**7 x 8 = 56**

**Surfin' x Skate = Fishy Sticks**

## STORY

Once there was a roller skate who loved to surf all year long. One winter day he became cold. He borrowed a fishing pole and as he surfed along, the skate would snag fishy smelling sticks with the hook. When he got to the beach, he piled up the sticks and went surfing again. Soon, the SURFIN' (7) SKATE (8) had enough FISHY STICKS (56) to build a big warm fire.

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 7 x 8 | 2) 3 x 4 | 3) 4 x 7 | 4) 5 x 6 | 5) 6 x 8 |
| 6) 9 x 7 | 7) 3 x 8 | 8) 9 x 4 | 9) 8 x 7 | 10) 2 x 9 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 7 x 7 =___ | 12) 3 x 3 =___ | 13) 8 x 6 =___ |
| 14) 8 x 9 =___ | 15) 6 x 6 =___ | 16) 7 x 3 =___ |
| 17) 5 x 9 =___ | 18) 7 x 5 =___ | 19) 9 x 9 =___ |
| 20) 4 x 6 =___ | 21) 7 x 8 =___ | 22) 5 x 5 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 6 x 7 | 40 | 8 x 9 |
| 3 x 6 | 16 | 7 x 6 |
| 7 x 8 | 18 | 8 x 5 |
| 9 x 3 | 49 | 8 x 4 |
| 4 x 8 | 42 | 7 x 7 |
| 9 x 8 | 54 | 6 x 3 |
| 4 x 4 | 56 | 3 x 9 |
| 6 x 9 | 32 | 9 x 6 |
| 7 x 7 | 72 | 8 x 7 |
| 5 x 8 | 27 | 4 x 4 |

# 7 x 8 = 56

Name _____ Date _____

## PICTURE

Draw your own picture for 7 x 8 = 56.

**7 x 8 = 56**

**_____ x Skate = _____**

## STORY

In your own words, write the story that helps you remember 7 x 8 = 56.

## PROBLEM

Seven scorpions (eight-legs each) were basking in the sun. How many scorpion legs? (In words and pictures, show your thinking.)

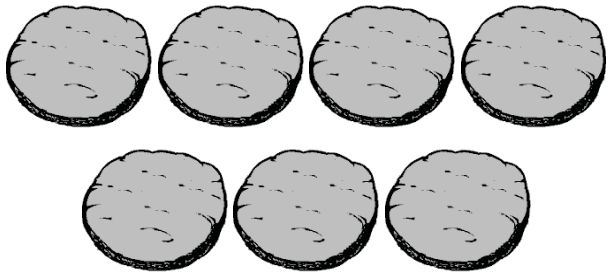
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 7 x 8 = 56.

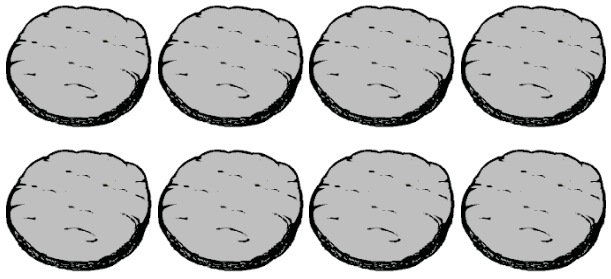
## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**7 x 8 = 56 (7 sets of 8 = 56)**



**8 x 7 = 56 (8 sets of 7 = 56)**



# 8 x 8 = 64

Name _____ Date _____

## PICTURE

**8 x 8 = 64**

**Skate x Skate = Sticky Floor**

## STORY

Two skaters went to a skating rink. They put on their skates and started skating, but after a few minutes they stopped moving. They didn't know what was wrong. They looked down and were surprised to see the floor covered with sticky, gooey gum. His SKATES (8) and her SKATES (8) were stuck to the STICKY FLOOR (64).

## PRACTICE 1

| | | | | |
|---|---|---|---|---|
| 1) 7 x 8 | 2) 3 x 5 | 3) 8 x 8 | 4) 5 x 8 | 5) 3 x 8 |
| 6) 7 x 9 | 7) 6 x 4 | 8) 4 x 5 | 9) 7 x 7 | 10) 9 x 4 |

## PRACTICE 2

| | | |
|---|---|---|
| 11) 4 x 8 =___ | 12) 9 x 9 =___ | 13) 6 x 7 =___ |
| 14) 7 x 4 =___ | 15) 5 x 6 =___ | 16) 3 x 3 =___ |
| 17) 3 x 6 =___ | 18) 9 x 6 =___ | 19) 8 x 8 =___ |
| 20) 7 x 7 =___ | 21) 7 x 8 =___ | 22) 3 x 9 =___ |

## CONNECT

Draw a line from the factor to the answer.

| | | |
|---|---|---|
| 6 x 8 | 12 | 2 x 8 |
| 3 x 7 | 21 | 8 x 9 |
| 6 x 6 | 64 | 9 x 5 |
| 5 x 9 | 72 | 6 x 2 |
| 4 x 3 | 48 | 5 x 7 |
| 7 x 5 | 45 | 5 x 5 |
| 8 x 8 | 35 | 7 x 3 |
| 5 x 5 | 16 | 8 x 8 |
| 9 x 8 | 36 | 8 x 6 |
| 4 x 4 | 25 | 6 x 6 |

# 8 x 8 = 64

Name _____ Date _____

## PICTURE

Draw your own picture for 8 x 8 = 64.

**8 x 8 = 64**

**_____ x Skate = _____**

## STORY

In your own words, write the story that helps you remember 8 x 8 = 64.

## PROBLEM

Eight tarantulas (eight-legs each) were climbing a tree. How many legs on all eight tarantulas? (In words and pictures, show your thinking.)

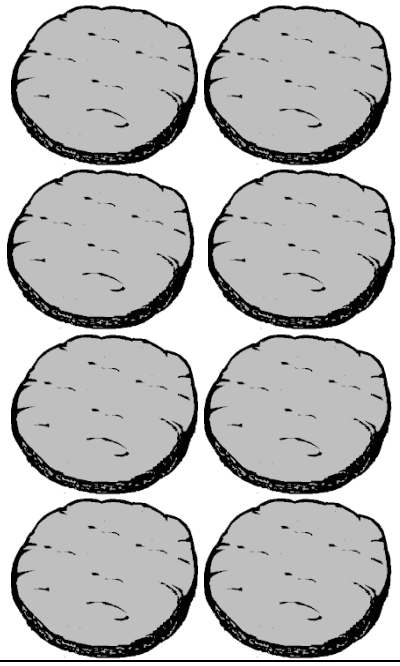
## PRACTICE

In the space below, write a story problem that is based on the multiplication fact 8 x 8 = 64.

## CONCEPT

Add chocolate chips to the cookies below to represent the multiplication fact.

**8 x 8 = 64 (8 sets of 8 = 64)**



# Track Your Progress

**Quiz Record Chart**

Name _____

Date _____

| Quick Quiz | | | | |
|---|---|---|---|---|
| Quick Quiz # | | New Fact | Score | Time |
| 1 | a | Zeros | | |
| | b | Zeros | | |
| 2 | a | Ones | | |
| | b | Ones | | |
| 3 | a | Twos | | |
| | b | Twos | | |
| 4 | a | Fives | | |
| | b | Fives | | |
| 5 | a | Nines | | |
| | b | Nines | | |
| 6 | a | 3x3 | | |
| | b | 3x3 | | |
| 7 | a | 3x4 | | |
| | b | 3x4 | | |
| 8 | a | 3x6 | | |
| | b | 3x6 | | |
| 9 | a | 3x7 | | |
| | b | 3x7 | | |
| 10 | a | 3x8 | | |
| | b | 3x8 | | |
| 11 | a | 4x4 | | |
| | b | 4x4 | | |
| 12 | a | 4x6 | | |
| | b | 4x6 | | |
| 13 | a | 4x7 | | |
| | b | 4x7 | | |
| 14 | a | 4x8 | | |
| | b | 4x8 | | |
| 15 | a | 6x6 | | |
| | b | 6x6 | | |
| 16 | a | 6x7 | | |
| | b | 6x7 | | |
| 17 | a | 6x8 | | |
| | b | 6x8 | | |
| 18 | a | 7x7 | | |
| | b | 7x7 | | |
| 19 | a | 7x8 | | |
| | b | 7x8 | | |
| 20 | a | 8x8 | | |
| | b | 8x8 | | |
| 21 | a | Review | | |
| | b | Review | | |

| Missing Factor Quiz | | | | |
|---|---|---|---|---|
| Quiz # | | New Fact | Score | Time |
| 1 | m | Zeros | | |
| 2 | m | Ones | | |
| 3 | m | Twos | | |
| 4 | m | Fives | | |
| 5 | m | Nines | | |
| 6 | m | 3x3 | | |
| 7 | m | 3x4 | | |
| 8 | m | 3x6 | | |
| 9 | m | 3x7 | | |
| 10 | m | 3x8 | | |
| 11 | m | 4x4 | | |
| 12 | m | 4x6 | | |
| 13 | m | 4x7 | | |
| 14 | m | 4x8 | | |
| 15 | m | 6x6 | | |
| 16 | m | 6x7 | | |
| 17 | m | 6x8 | | |
| 18 | m | 7x7 | | |
| 19 | m | 7x8 | | |
| 20 | m | 8x8 | | |
| 21 | m | Review | | |

| Picture Quiz | | | | |
|---|---|---|---|---|
| Quiz # | | New Fact | Score | Time |
| 1 | p | Zeros | | |
| 2 | p | Ones | | |
| 3 | p | Twos | | |
| 4 | p | Fives | | |
| 5 | p | Nines | | |
| 6 | p | 3x3 | | |
| 7 | p | 3x4 | | |
| 8 | p | 3x6 | | |
| 9 | p | 3x7 | | |
| 10 | p | 3x8 | | |
| 11 | p | 4x4 | | |
| 12 | p | 4x6 | | |
| 13 | p | 4x7 | | |
| 14 | p | 4x8 | | |
| 15 | p | 6x6 | | |
| 16 | p | 6x7 | | |
| 17 | p | 6x8 | | |
| 18 | p | 7x7 | | |
| 19 | p | 7x8 | | |
| 20 | p | 8x8 | | |
| 21 | p | Review | | |

# Track Your Progress

**Quiz Record Chart**

Name _____

Date _____

**Quick Quiz**

| Quick Quiz # | | New Fact | Score | Time |
|---|---|---|---|---|
| 1 | a | Zeros | | |
| | b | Zeros | | |
| 2 | a | Ones | | |
| | b | Ones | | |
| 3 | a | Twos | | |
| | b | Twos | | |
| 4 | a | Fives | | |
| | b | Fives | | |
| 5 | a | Nines | | |
| | b | Nines | | |
| 6 | a | 3x3 | | |
| | b | 3x3 | | |
| 7 | a | 3x4 | | |
| | b | 3x4 | | |
| 8 | a | 3x6 | | |
| | b | 3x6 | | |
| 9 | a | 3x7 | | |
| | b | 3x7 | | |
| 10 | a | 3x8 | | |
| | b | 3x8 | | |
| 11 | a | 4x4 | | |
| | b | 4x4 | | |
| 12 | a | 4x6 | | |
| | b | 4x6 | | |
| 13 | a | 4x7 | | |
| | b | 4x7 | | |
| 14 | a | 4x8 | | |
| | b | 4x8 | | |
| 15 | a | 6x6 | | |
| | b | 6x6 | | |
| 16 | a | 6x7 | | |
| | b | 6x7 | | |
| 17 | a | 6x8 | | |
| | b | 6x8 | | |
| 18 | a | 7x7 | | |
| | b | 7x7 | | |
| 19 | a | 7x8 | | |
| | b | 7x8 | | |
| 20 | a | 8x8 | | |
| | b | 8x8 | | |
| 21 | a | Review | | |
| | b | Review | | |

**Missing Factor Quiz**

| Quiz # | | New Fact | Score | Time |
|---|---|---|---|---|
| 1 | m | Zeros | | |
| 2 | m | Ones | | |
| 3 | m | Twos | | |
| 4 | m | Fives | | |
| 5 | m | Nines | | |
| 6 | m | 3x3 | | |
| 7 | m | 3x4 | | |
| 8 | m | 3x6 | | |
| 9 | m | 3x7 | | |
| 10 | m | 3x8 | | |
| 11 | m | 4x4 | | |
| 12 | m | 4x6 | | |
| 13 | m | 4x7 | | |
| 14 | m | 4x8 | | |
| 15 | m | 6x6 | | |
| 16 | m | 6x7 | | |
| 17 | m | 6x8 | | |
| 18 | m | 7x7 | | |
| 19 | m | 7x8 | | |
| 20 | m | 8x8 | | |
| 21 | m | Review | | |

**Picture Quiz**

| Quiz # | | New Fact | Score | Time |
|---|---|---|---|---|
| 1 | p | Zeros | | |
| 2 | p | Ones | | |
| 3 | p | Twos | | |
| 4 | p | Fives | | |
| 5 | p | Nines | | |
| 6 | p | 3x3 | | |
| 7 | p | 3x4 | | |
| 8 | p | 3x6 | | |
| 9 | p | 3x7 | | |
| 10 | p | 3x8 | | |
| 11 | p | 4x4 | | |
| 12 | p | 4x6 | | |
| 13 | p | 4x7 | | |
| 14 | p | 4x8 | | |
| 15 | p | 6x6 | | |
| 16 | p | 6x7 | | |
| 17 | p | 6x8 | | |
| 18 | p | 7x7 | | |
| 19 | p | 7x8 | | |
| 20 | p | 8x8 | | |
| 21 | p | Review | | |