

# Math Moments For Third Grade



## Beginning strategies to use:

$$5 \times 3 = 15$$

Number of groups  $\times$  number in each group

### Repeated addition

$$2 + 2 + 2 = 6$$

### Arrays

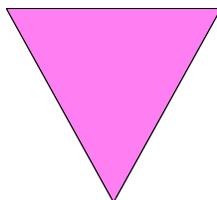
$$4 \times 3 = 12$$



### Skip Counting

2, 4, 6, 8, 10, 12

### Fact Family Triangles



## Properties of Multiplication:

### Identity Property

Any number multiplied by one stays that number

**Example:**

$$6 \times 1 = 6$$

### Zero Property

Any number multiplied by zero will always be zero

**Example:**

$$0 \times 8 = 0$$

### Distributive Property

Multiplying a sum by the number is the same as multiplying each addend by the number and then adding the products

**Example:**

$$3 \times (4 + 2) = (3 \times 4) + (3 \times 2)$$

$$3 \times 6 = 12 + 6$$

$$18 = 18$$

### Commutative Property

You can multiply two factors in any order and get the same answer

**Example:**

$$2 \times 4 = 8$$

$$4 \times 2 = 8$$

### Associative Property

When the grouping of factors is changed, the product remains the same

**Example:**

$$(3 \times 2) \times 4 = 24$$

$$3 \times (2 \times 4) = 24$$

### Key vocabulary words:

**Factor-** two numbers which when multiplied together gives a certain product.

**Product-** answer to a multiplication problem

## Learning the 5's

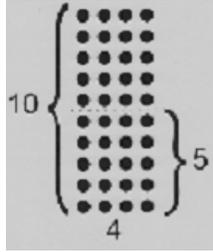
### Half Fact:

$4 \times 5$  is half of  $4 \times 10$

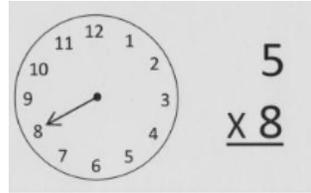
$4 \times 10 = 40$

One half of 40 is 20

So,  $4 \times 5 = 20$



Clock face:



## Learning the 3's

Use the 2's plus one more group

Think  $2 \times 5 = 10$

plus one more group of 5

=

$10 + 5 =$

So,  $3 \times 5 = 15$

## Learning the 2's

Doubles:

$$2 \times 4 = 8$$

$$4 + 4 = 8$$

## Learning the 8's

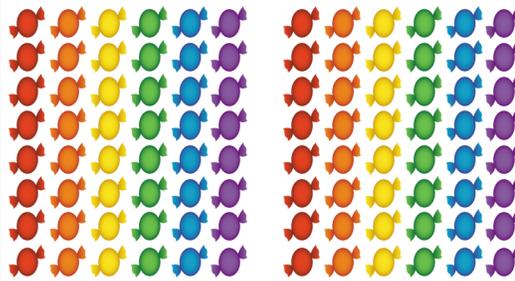
### Half, and Double

$$8 \times 6 =$$

↓ (half)

$$4 \times 6 = 24$$

$$24 + 24 = 48 \text{ (double)}$$



## Learning the 6's

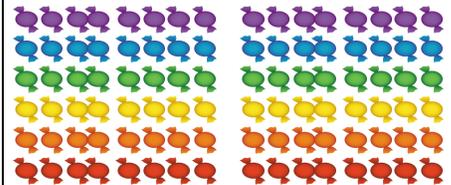
### Half, and Double

$$6 \times 8 =$$

↓ (half)

$$3 \times 8 = 24$$

$$24 + 24 = 48 \text{ (double)}$$



## Learning the 4's

### Double, Double:

$$4 \times 9 = 2 \times 9 \text{ doubled}$$

$$2 \times 9 = 18$$

$$18 + 18 = 36$$

$$\text{so, } 4 \times 9 = 36$$

## Learning the 9's

use the 10's facts minus one set

$$9 \times 6 =$$

THINK.....

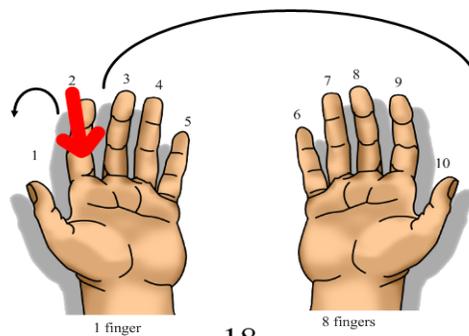
$$10 \times 6 = 60$$

$$\text{So, } 60 - 6 = \underline{\quad}$$

Can you count? →

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

### hand trick



### Nifty Nines

$$9 \times \boxed{4}$$

one less



make 9



# Organization

## Microsoft

Primary Business Address  
Address Line 2  
Address Line 3  
Address Line 4

Phone: 555-555-5555  
Fax: 555-555-5555  
E-mail:  
someone@example.com

We're on the Web!  
example.com

This would be a good place to insert a short paragraph about your organization. It might include the purpose of the organization, its mission, founding date, and a brief history. You could also include a brief list of the types of products, services, or programs your organization offers, the geographic area covered (for example, western U.S. or European markets), and a profile of the types of customers or members served.

It would also be useful to include a contact name for readers who want more information about the organization.

## Business Tagline or Motto

## Back Page Story Headline

This story can fit 175-225 words. If your newsletter is folded and mailed, this story will appear on the back. So, it's a good idea to make it easy to read at a glance.

A question and answer session is a good way to quickly capture the attention of readers. You can either compile questions that you've received since the last edition or you can summarize some generic questions that are frequently asked about your organization.

A listing of names and titles of managers in your organization is a good way to give your newsletter a personal touch. If your organization is small, you may want to list the names of all employees.

If you have any prices of standard products or services, you can

include a listing of those here. You may want to refer your readers to any other forms of communication that you've created for your organization.

You can also use this space to remind readers to mark their calendars for a regular event, such as a breakfast meeting for vendors every third Tuesday of the month, or a biannual charity auction.

If space is available, this is a good place to insert a clip art

image or some other graphic.



**Caption describing picture or graphic.**