# Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



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## Grades 3 Mathematics Extension Menu

**Concept and/or Topic:** Multiplication

**Directions: Choose** a learning activity from one square to complete. If you choose the square, “Write your idea here,” please see the teacher with your idea first. **Circle**the number of the learning activity you choose.

**Turn in**this paper with your work.

|  |  |  |
| --- | --- | --- |
| 1. **Solve** the following problem:  A friend has a new dog. The dog needs a leash that is 3 yards long. You have a rope that is 7 feet long. Do you have enough rope to make the dog’s leash? **Explain** why or why not using pictures, words and/or numbers.  Challenge: **Write** and **solve** your own word problem that includes inches, feet and yards. | 2. **Create** and illustrate a story problem using one of the following equations:   * 3 x 7 = 21 * 4 x 6 = 24 * 15 x 5 = 75 * 4 x 20 = 80 | 3. **Design** 3-5 pages for a *Creature Critter* booklet as follows:   * **Select** and name a type of *Creature Critter* for each page of your booklet. * **Determine** the number of legs each different *Creature Critter* will have. * **Draw** three or more of the same type *Creature Critter* on each page. * **Write** an equation using multiplication to represent the total number of legs found on each page.   Extension: **Create** a cover for the *Creature Critter* booklet that includes a title and illustration. |
| 4. **Evaluate** the numeric expressions 24 x 7 and 2 x 84.  **Develop** a multiplication problem that has the same product as these two numeric expressions.  **Explain** the strategy you used to develop this problem. **Play** the game*Fun with Numeric Expressions.* | 5. **Write** your idea here. | 6. **Create** a 7” x 9” mosaic by using red, blue, green, and yellow color tiles. **Draw** your mosaic on graph paper using colored pencils.**Determine** the cost of your mosaic usingthe prices below.  Blue tiles cost $2.00 each.  Red tiles cost $3.00 each.  Green tiles cost $4.00 each.  Yellow tiles cost $5.00 each. |

Teacher Resource Page

Grades 3 Mathematics Extension Menu

**Concept and/or Topic: Multiplication**

**Intended Purpose: Extension/Enrichment Activity**

**Standard(s) and Indicators Addressed:**

**Standard 1.0:** Knowledge of Algebra, Patterns and Functions:

Students will algebraically represent, model, analyze, or solve mathematical or real world problems involving patterns or functional relationships

**Standard 3.0:** Knowledge of Measurement:

Students will identify attributes, units, or systems of measurement or apply a variety of techniques, formulas, tools, or technology for determining measurements

**Standard 6.0:** Knowledge of Number Relationships and Computation: Students will describe, represent, or apply numbers or their relationships and will estimate and compute using mental strategies, paper/pencil or technology.

**Standard 7.0** Processes of Mathematics:

Students will demonstrate the processes of mathematics by making connections and applying reasoning to solve problems and to communicate their findings

**Indicators:**

Box 1: MA. 300.30.10: Calculate to determine equivalent units of 12 inches = 1 foot and 3 feet = 1 yard

Box 2: MA.300.10.13a: Represent and describe an everyday situation that models a given numeric

expression or number sentence and

MA.300.60.28: Explore/invent concrete, pictorial, and symbolic representations for multiplication of a two-digit number by a one-digit number

Box 3: MA.300.60.27: Model and explain concrete, pictorial,

and symbolic representations of multiplication/division number combinations 0-9

Box 4: MA. 300.60.27 Model and explain concrete, pictorial, and symbolic representations of multiplication/division number combinations 0 to 9

MA.300.60.28 Explore/invent concrete, pictorial, and symbolic representations for multiplication of a two-digit number by a one-digit number

Box 6: MA.300.60.32:Demonstrate proficiency of number combinations: multiplication and related division and related division

MA.300.70.12: Represent, explain and write about mathematical ideas and solutions

using objects, pictures, data displays, mathematical language, and symbols

**Organizational Tips:**

**Provide students with access to the following books:**

* Each Orange Has 8 Slices by Paul Giganti
* Spaghetti and Meatballs for All – A Mathematical Story by Marilyn Burns
* More M & M’s Math by Barbara B. McGrath

Boxes 1, 2 & 4: Provide paper and pencil.

Box 3: Provide paper, pencil, colored pencils, crayons, markers, etc.

Box 6: Provide paper, colored pencils and *Color Tiles* (red, blue, green, and yellow) for each student.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fun with



Numeric Expressions

**Directions:**

1. **Determine** three numeric expressions that have the same product.
2. **Write** each expression on a separate sheet of paper.
3. **Show** two of your numeric expressions to a friend.
4. **Ask** your friend to determine another numeric expression with the same product you chose.
5. **Compare** your friend’s numeric expression with your third numeric expression.
6. **Discuss** with your friend how each of you selected your numeric expressions.
7. **Work** with your friend to determine if there are more numeric expressions with the same product you started with.