



Third Grade Newsletter

December 2023

Important Dates

Tuesday 12/5 - School Store, Picture Day Make Ups

Thursday 12/7 - Parent/Teacher Conferences

Monday 12/11 - Friday 12/15 - Scholastic Book Fair

Tuesday 12/12 - Winter Concert Assembly

Thursday 12/14 - Book Fair Family Night and Spelling Bee

Thursday 12/14 - Thursday 12/21 - Holiday Shop

Wednesday 12/20 - Field trip to Mt. Airy Bowling Lanes

Friday 12/22 - 2 hour 45 minute early dismissal

Monday 2/25 - Monday 1/1 Winter Break

Tuesday 1/2 - Schools Reopen

Reminders

Please make sure your child brings a jacket or sweatshirt to school. The days are getting cooler and they will be outside for recess on most days.

Please check your child's pencil pouch for needed supplies. We're especially running low on pencils.

We are always thankful for donations of tissues, paper towels, and sandwich and

What are we learning?

Math

This month in math we will be finishing up our Equal Partitioning and Naming Fractions Unit. Stay tuned for the test date! Our next unit takes us back to Multiplication and Division. Please see attached Parent Letter and Math Memo for more details about the upcoming unit, along with ways you can help your child at home.

Science

In science we will finish up our Forces and Interactions unit, culminating with a field trip to the bowling alley!

Our next unit is Inheritance and Variation of Traits. Please see attached Parent Letter for more information.

Humanities

In Humanities, we will be focusing on nonfiction texts. We will look at how text features help us understand the text, main idea and details, and summarizing the text. Our writing will also focus on writing a nonfiction paragraph using State, Cite, Explain.

This year, students will be typing responses on assessments. Any and all typing practice is great. There are some typing programs you can find on CLEVER for your child to work through.

Stay in Touch!

Please reach out to your child's teacher with any questions or concerns!

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THIRD GRADE MATHEMATICS – Unit 4

Dear Parents,

Your child will be learning about multiplication and division over the course of several units. During this unit, your child will continue to develop an understanding of the meanings of multiplication and division of whole numbers through activities and problems involving equal-sized groups, arrays, and area sized models. He/she will come to understand multiplication as finding an unknown product and division as finding an unknown factor. A variety of equal-sized group situations will be presented to develop the understanding that division can require finding the unknown number of groups or the unknown group size. Strategic practice in order to become fluent with multiplication and division facts will continue throughout this unit.

By the end of Unit 4, students will be expected to be able to solve two-step word problems and choose the equation that represents the situation with a letter standing for the unknown quantity. In Unit 5, students will be expected to solve two-step word problems and write the equation that represents the situation with a letter standing for the unknown quantity.

MULTIPLICATION AND DIVISION

Students need to:

- Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities. Use drawings and equations with a symbol for the unknown number to represent the problem.
- Identify arithmetic patterns (including patterns in the addition and multiplication table) and explain them using properties of operations.
- Interpret whole-number quotients of whole numbers. For example, interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned equally into equal shares of 8 objects each. Describe a context in which a number of shares or a number of groups can be expressed as $56/8$
- Solve two-step word problems using the four operations. Represent these problems using equations with a letter for the unknown quantity. Assess reasonableness of answers using mental computation and estimation strategies including rounding.
- Multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g. knowing that $8 \times 5 = 40$, one knows $40/8=5$) or properties of operations.
- Apply properties of operations as strategies to multiply and divide.

KEY VOCABULARY

array: an arrangement of objects in equal columns and rows

area: the number of square units needed to cover a surface

Commutative Property of Multiplication: a property of multiplication in which the product stays the same when the order of the factors is changed (i.e., $a \times b = b \times a$)

dividend: the number being divided

divisor: the number by which a dividend is being divided

factor: the numbers or terms multiplied in an expression. (a factor times a factor equals the product)

multiple: the product when numbers are multiplied together

partition: a division into or distribution in portions or shares

product: the result of multiplying one factor times another factor $8 \times 8 = 64$

square unit: a unit for measuring area such as square inch, square centimeter, or square mile

quotient: the result of division $24 \div 3 = 8$

WAYS PARENTS CAN HELP

- Refer to the ideas described in the Unit One Parent Letter. They apply to this Unit as well.
- Play Multiplication War. This game is played quite similarly to traditional "war". Arrange the deck by taking out all of the face cards, 9, 8 and 7. This will ensure the facts created will only be those in Set One and Set Two. 1. Shuffle the deck and deal all cards out to the two players. 2. The players each turn over two cards. 3. Each player multiplies the two cards, and says aloud the entire equation- "9 times 2 is 18" instead of just "18". 4. The player with the greater product takes all of the cards. 5. If there is a tie in naming the product, "war" begins. Each player places 3 cards face down, then they turn over two to multiply together. The player with the greater product takes all of the cards on the table. 6. Play ends when either player has all the cards or after an allotted time. The winner is the player with the most cards.
- Play Hit the Target. Remove the face cards from a deck of playing cards. 1. Have one player close his or her eyes and choose one card from the deck. The number on that card is your target. 2. Place the remaining cards face up on the playing surface. 3. All players take turns looking for two cards that you can add, subtract, multiply or divide to get the number on the target card. 4. When a combination is correctly found/stated the player takes the set of cards. 5. If the player is incorrect, he loses a turn. 6. If a player cannot find a combination he passes and is out of the game for that round. Play continues with the next player. 7. Keep playing until no more combinations can be found that equal the target number. 8. Each player receives one point for each pair earned. 9. Repeat the game with a different target number. 10. The winner is the first person to earn ____ points.

Online Activities

<http://www.thinkingblocks.com/> (Solve simple multiplication problems.)

<http://www.fun4thebrain.com/mult.html> (Use the chart below to choose facts appropriate for practice.)

http://investigations.terc.edu/library/Games_23.cfm#a_multiplication (Use the chart below to choose facts appropriate for practice.)

BACKGROUND INFORMATION AND EXAMPLES FOR PARENTS

Vocabulary Resources:

Online Math Dictionary: <http://www.amathsdictionaryforkids.com/>

NOTE: For CCPS videos, you **may** need to download the video to view it.

Finding Area Using Arrays:

[Arrays to find area](#)

MULTIPLICATION AND DIVISION FACTS

During this Unit students will develop an understanding of the Distributive Property of Multiplication. Students will use this understand to multiply two single digit numbers.

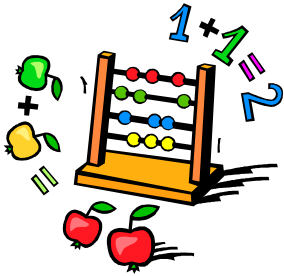
You might hear your child say, "I am halving then doubling" with factors of 4, 6, and 8 or " I am partitioning then adding" for factors of 7 and 9.

Students will be assessed through the use of interviews, observations, journaling, and fact checks.

**3rd Grade
Math**

Math Memo

**Unit
3.4**



Multiplication & Division Facts

Maryland College and Career Readiness Standard

3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division. *This standard will continue to be taught in future units.

Multiples of 3

Example: 3 x 7

Decompose 3 into 2&1

$$(2 \times 7) + (1 \times 7) = a$$

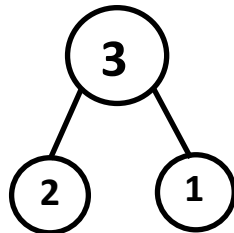
$$14 + 7$$

$$a = 21$$

1 X X X X X X X

2 X X X X X X X

3 X X X X X X X



Multiples of 4

Example: 4 x 8

Decompose 4 into 2&2

$$(2 \times 8) + (2 \times 8) = b$$

$$16 + 16$$

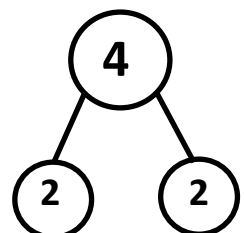
$$b = 32$$

1 X X X X X X X X

2 X X X X X X X X

3 X X X X X X X X

4 X X X X X X X X



Multiples of 6

Example: 4 x 6

Decompose 6 into 5&1

$$(4 \times 5) + (4 \times 1) = c$$

$$20 + 4$$

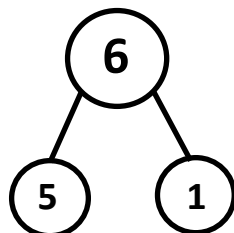
$$c = 24$$

1 X X X X X X X

2 X X X X X X X

3 X X X X X X X

4 X X X X X X X



To help us master our 3's, 4's, and 6's facts, we have been decomposing the 3, 4, or 6 factor into two smaller parts; multiples that we are fluent with. There are a variety of ways your child can decompose the factors; please encourage him/her to choose numbers that work for best for them!

Then we use the distributive property, or "flossing", to help us solve the equation more efficiently.

**3rd Grade
Math**

Math Memo

**Unit
3.4**



Multiplication & Division: Unknowns

Maryland College and Career Readiness Standard
3.OA.6 Understand division as an unknown factor problem.

Example #1: Fact Families

$$6 \times 8 = 48$$

$$8 \times 6 = 48$$

$$48 \div 8 = 6$$

$$48 \div 6 = 8$$

Example #2

To solve $24 \div 6 = n$,

Mrs. Glass asked herself, "What do I need to multiply by 6 to make 24?"

Problem Solving Strategy

~ When there is an unknown in a multiplication equation, turn it into a division equation. Draw groups/array, and put one in each until you get to the total.

~ When there is an unknown in a division equation, use the divisor (2nd number) or quotient (last number) as your amount of groups/rows. Again, put one in each until you get to the total (dividend).

Example #3

$$\underline{\quad} \times 6 = 36$$

$$7 \times \underline{\quad} = 21$$

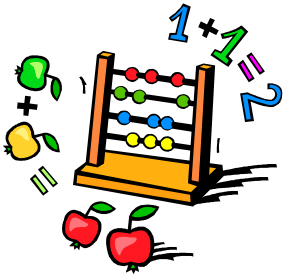
$$24 \div \underline{\quad} = 6$$

$$20 \div 5 = \underline{\quad}$$

**3rd Grade
Math**

Math Memo

**Unit
3.4**



Multiplication & Division: Patterns

Maryland College and Career Readiness Standard
3.OA.9 Identify arithmetic patterns and explain them using properties
or operations. * This standard will continue to be taught in future units.

Example #1:

You know that $7 \times 2 = 14$.

Explain how you can use that fact to help you solve 7×4 .

Example #2:

Shade the multiples of 4 on a hundreds chart.

Explain the patterns that you notice.

Two is half of 4, if you double 7×2 , you will get the same product as 7×4 .

$$(7 \times 2) + (7 \times 2) = 28$$

| | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

**3rd Grade
Math**

Math Memo

**Unit
3.4**

Multi-Step Word Problems

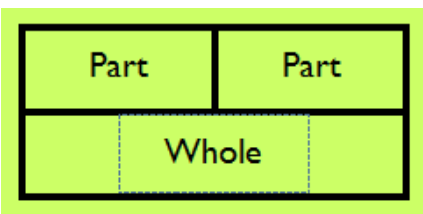


Maryland College and Career Readiness Standard

3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. *This standard will continue to be taught in future units

Bar Model

- ~ Combine the parts to create the whole
- ~ Take a part away from the whole to discover the unknown part.



Equations

- ~ Use parentheses to separate the steps of your equations.
- ~ Be sure to use a letter to represent the unknown!

Example: $(7 \times 3) - 12 = a$

Problem Solving Check-List

1. Read the story and visualize what is happening; **Retell** the story, not focusing on the numbers.
2. Turn the question into a **telling statement**.
3. Re-read the story.
4. Discuss what is happening mathematically in the story; **What do the numbers represent?**
5. Write one or more **equations**, using a letter for the unknown.
6. **Solve** your equation (s), using an efficient problem solving strategy.
7. Don't forget to **check** for accuracy
 - ~ Check your numbers
 - ~ Check your operations
 - ~ Check your computation



Third Grade Science

Inheritance and Variation of Traits

Dear Families,

Here is what your child is learning in Third Grade during the study of inheritance and variation of traits and some specific ways you can help. Look for additional newsletters for upcoming units.

Inheritance and Variation of Traits

Students will be able to:

- Identify that organisms have unique and diverse life cycles but all share the process of birth, growth, reproduction, and death.
- Identify and explain that plants and animals have traits that are inherited from parents and a variation of these traits exists in a group of similar organisms.
- Identify that traits can be influenced by the environment and variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing.

Key Vocabulary

Metamorphosis- change of form

Simple Metamorphosis- egg – nymph – adult

Complete Metamorphosis – egg – larva – pupa – adult

Traits – qualities or features or other things that distinguish the organism

Acquired Traits – traits that cannot be passed on genetically, acquired characteristics over time

Inherited Traits – passed on genetically, must come from parents or grandparents

Discovery Education Links:

Insect Life Cycles: [Insect Life Cycles: Metamorphosis](#)

Heredity and Traits: [Heredity and Traits](#)

Inherited Traits: [Inherited Trait](#)

Acquired Traits: [Acquired Traits](#)

How Plants Adapt: [How Plants Adapt](#)

Ways FAMILIES Can Help

- Use the Discovery Education links to learn more information.
- Be attentive to the plants and animals around you.
- Discuss with your parents' different traits that you have inherited from them (hair color, eye color, height etc.)
- Look for different ways plants and animals adapt to their environment.