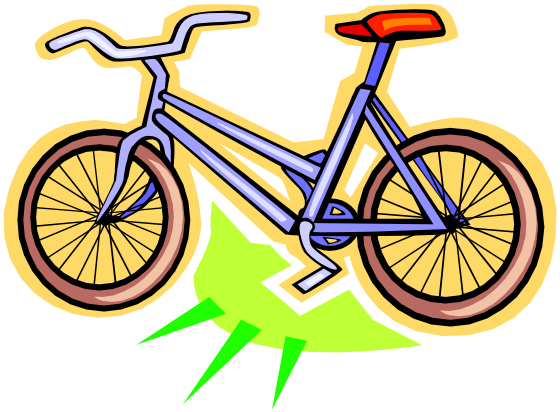
WATERTOWN PUBLIC SCHOOLS

GRADE 3 TEACHERS

PRESENT

2019 SUMMER MATH FUN



FOR STUDENTS

ENTERING GRADE 4

Summer 2019

Dear Student and Family,

Congratulations on completing Third Grade! You have learned so much in math this year! This summer it is important to keep practicing all the great math skills and strategies you have already learned as a third grader so that you can be ready for next year. In this packet you will find daily math activities that will help you review and maintain math skills learned throughout the past year.

Summer Math Fun has been made as a calendar for the months of July and August. We'd like you to try to do a math activity at least 30 days this summer by working on the attached calendar problems, playing math games, or participating in another math activity. Just a few minutes each day spent "thinking and talking math" will help reinforce the math that you have learned and begin to prepare you for all the new concepts you will learn in Fourth Grade. The goal of this packet is to keep you fresh while still having fun. Remember to discuss how you solved a problem, what strategies you used, why you used them, and how you know your solution makes sense. All you have to do is follow the daily calendar, complete the activities and initial the days that you did math. Do your best to complete as many of the activities as you can and have your family help you too! You can also try some of these sites online.

Take the CT Commissioner's Summer Math Challenge!

- **https://portal.ct.gov/SDE/Math/Summer-Math-Challenge**

Practice your math fact fluency

- **https://www.reflexmath.com/**

Daily and nightly fun math problems

- **http://bedtimemath.org/**

A great site for math fact practice at XtraMath

- **http://xtramath.org/**

Lots of games by grade level and interest at ABCYA

- **http://www.abcya.com/**

Maintain and brush up on lessons from IReady

- **https://login.i-ready.com/login**

Math Games by grade level

- **https://www.prodigygame.com/**

More fun math games organized by grade or subject at HoodaMath

- **http://www.hoodamath.com/games/**

The game site, Calculation Nation, is from the National Council for Teachers of Mathematics

- **https://calculationnation.nctm.org/**

Interactive math and science simulations for grades 3-12 with Gizmos

- **https://www.explorelearning.com/**

Fun math games have also been included in this packet. To play the games you will need a deck of cards. The games reinforce math skills that have been taught throughout the year and will provide you with fun ways to practice your math skills. When you have completed the packet, please sign the contract below and return just the slip to your new teacher by **September 20th.** There is no need to turn in the entire packet. Most importantly, have a safe and happy vacation!

I, _____, completed at least 30 days of math practice this summer by doing any of the following: the calendar problems, online math games, cards games, and _____ (tell us what you did that involved math this summer!).

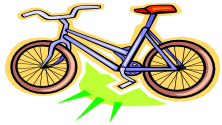
_____ STUDENT SIGNATURE

_____ PARENT/GUARDIAN SIGNATURE and DATE

Fourth grade teacher_____

Summer 2019

Entering Grade 4 Summer Math Fun
July 2019



Complete at least 30 days total for the summer. Do your work in a separate place. Parents please initial days completed. Turn in the above slip!				**How many years have passed since the Declaration of Independence was signed in 1776?**
Practice your facts on reflexmath.com until you get the green light! Try this at least 4 times a week.	**How much money do I have if I have: 2 quarters, 6 dimes, 3 nickels, and 4 pennies?**	**Subtract: 914- 635. Use two different strategies. Check your work with a calculator.**	**Start at 170. Take turns skip counting down by 5's with an adult.**	**Use the digits 1 to 9, at most one time each, to fill in the blanks to make the latest possible time.** **____ ____ minutes after** **___:___ ___ pm**
Play "I Spy" with a friend. Find examples of quadrilaterals and name them if you can.	**Use the digits 1-9, at most one time each, to fill in the blanks to make two different pairs of three-digit numbers that form a true number sentence. __ __ __ - 348 = __ __ __**	**What are the unknown digits in the following equation?** **(5 x 5) + (__ x 2) = 5 x __**	**What are some ways to make $0.50? Use coins to try it. Record at least 3 ways without using pennies.**	**If soda costs $0.81, and you paid with $1.00, how much change should you get?**
Pick a two digit number and double it. Show your work.	**Multiply : 10 x 12. Have an adult check your work.**	**A comic books costs 0.47¢. The store owner reversed the two digits. How much did he overcharge the customer?**	**Find 5 things in your house that are longer than 6 inches, and shorter than one foot.**	**Use <,>, or =.** **341 + 25_____ 314+52** **(5x4) + (4 x4) _____ 6x6** **1/5 ____ 1/6**
Count the number of chairs in your house. Without counting, figure out how many legs there are in total. What was your strategy?	**Draw a square that is 3 inches long on each side. What is the perimeter? What is the area?**	**Using the whole numbers 1 through 9 as numerators or denominators one time each, how many fractions can you make that are less than one half?**	**Create a rectangle or square with blocks or legos and find the perimeter in cm.**	**Arrange the fractions in order, beginning with the least. Explain your answer with a picture. 1/6, 1/8, 1/3**

Entering Grade 4 Summer Math Fun
August 2019

What time is it now? What time will it be in 45 minutes?	**Start at 255. Skip count down by 5's with a partner.**	**I am a number between 20 and 30. When you divide me into 6 equal groups, there is an even number in each group and 2 are left over. What number am I? Write your own division riddle.**	**Estimate how long your bed is in feet. Measure it! <u>Challenge:</u> How many inches is that equal to?**	**Draw an array of stars that shows 3 rows of eight stars. <u>Challenge:</u> Can you draw a ring around 3/8 ths. of the stars?**
Arrange the digits 1-9 into three 3-digit whole numbers. Make the sum as close to 1000 as possible.	**Pick a 3 digit number. Can you double it? Triple it?**	**Write down a 3 digit number with a 5 in the ones place, and a 6 in the hundreds place that is more than 650.**	**Estimate how many jumping jacks you can do in a minute. Now try it.**	**Play one of the card games in the back of this packet.**
What time is it now? What time was it 20 minutes ago?	**A farmer has chickens and cows. What combination of animals could total 24 legs? Is there more than one combination?**	**Write the multiplication and division fact family for: 6, 7, and 42.**	**Estimate how long it will take you to walk to the end of your driveway. Try it! How long will it take if you run?**	**Add: 497 + 464. What strategy did you use?**
Estimate the number of pennies you can grab in one hand. Now grab a handful of pennies. Count the number of pennies you actually grabbed.	**Subtract: 401 - 226.**	**Practice your facts on <u>reflexmath.com</u> for 15 minutes.**	**Circle ¼ of the set of shapes:** 	**John has $10. He needs to buy two pens for $1.29. Estimate how much it will cost. Find the exact amount of change.**
I am a 2-digit number less than 50. If you put me in groups of 5, there are 2 left over. The sum of my digits is 9. What number am I?	**There are 20 candies in a package. I want to put four candies in each bowl. How many bowls will I need? Write an equation and solve the problem.**	**My garden has an area of 20 square feet. It is 5 feet long. How wide is my garden?**	**Sam is thinking of a number. It is less than 30 and more than 26. When you count by 3's you say the number. What number is Jack thinking of?**	**Create 5 fractions using the whole numbers 0 through 9, exactly one time each as numerators and denominators, and place them all on a number line..**

Card and Dice Games

Addition, Subtraction War OR Multiplication Compare Number of Players: Unlimited

Object of the Game : The object of the game is to win all of the cards.
All the cards are dealt out evenly between the players.
A = 1, picture cards = 10
Players each turn over 2 cards (face up) and add the values. The player with the largest sum, takes all the cards that were played.
When 2 or more players have the same sum, war is declared. Each player places 3 more cards face down, then 2 more face up to be added. The player with the largest sum wins all the cards.
Variation: Try subtracting! The player with the lowest difference gets the hand- OR- Try multiplying! The player with the largest product gets the hand.

Salute the General Number of Players: 3 players: One General and Two Captains

Object of the Game : Object is to collect the most cards.
Description
Ace is worth 1
Number cards are worth their value.
Face cards are worth 10.
General shuffles cards. The General gives one card to each of the Captains. The Captains may not look at their cards. The general decides whether the Captains will multiply or add.
When the General says, "Salute the General," both Captains raise the card to their forehead with the card is facing the other players. The cardholder cannot see his/her own card.
The General then adds or multiplies the two numbers and announces the sum or product.
The Captains then try to mentally figure out what number is on their card, and call it out.
If they are correct the Captains keep the cards. If they are not correct they give the card to the General.
To help build a repertoire of strategies, the General can asks: How do you know? The Captains can share their strategy for finding the sum.
Modifications
Decks can be "stacked" with cards that focus specific facts or strategies to be reinforced for the math level of the players.

Close to 1000 Number of Players: Unlimited

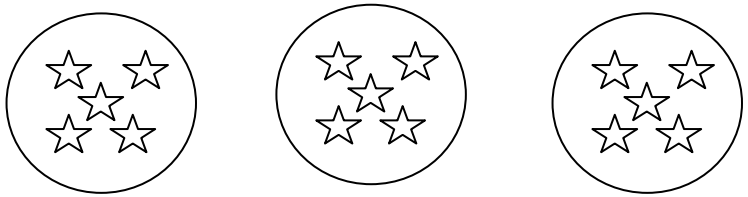
You need a deck of cards without the picture cards or the 10.
Each player gets 8 cards.

- Use the cards to make 3-digit numbers: for example, 6 ,5 and 3 could make 653, 563, 635, 536, 356, or 365. Try to make two 3-digit numbers that, when added, give you a total that is close to 1000.
- Record the sum of the two numbers that were added together and keep track of your score. Your score is the difference between the sum of your two numbers and 1000. For instance, you may have the cards 2, 3, 3, 4,4,5,6,8. You choose 4, 4 and 2 to make the number 442, and 5, 6 and 3 to make the number 563. 442 + 563 = 1005 so your score is 5 because the difference between 1005 and 1000 is 5. If your score was 997, then your score would be 3.
- Put the used cards in a discard pile and keep the two unused cards.
- Deal 6 new cards. Continue to make two 3-digit numbers that come close to 1000 in each round.
- Five rounds makes one game. Add the score for the five rounds. The player with the lowest score wins.

Variations
Play **Close to 0.** Instead of taking 8 cards and using 6 to add up to 1000, take 8 cards and use 6 to make two 3-digit numbers that when subtracted, get closest to zero.

Circles and Stars Number of Players: Unlimited

You need a number cube or die and paper and pencil.
Player one rolls the die and draws that many circles. Then he/she rolls again and draws that many stars in each circle. The player then records the multiplication sentence that matches the drawing. For instance, the first roll is a 3, so the player makes 3 circles. The next roll is a 5 so the player draws 5 stars in each circle. Then the player records the multiplication sentence and solves for the number of total stars. 3 x 5 = 15 or 3 groups of five stars is 15 stars total. The product is your score.
Play the game for five rounds. Add your five products for your total score. The winner is the one with the highest score (or lowest, you decide!).



3 x 5 = 15 stars