## Summer Math Students Entering Grade 5 - July

Complete at least 12 of the activities below for July. As you complete each activity color in the sun.
Additional information and activities can be found at: https://sites.google.com/a/franklinps.net/math-k-5/home/summer-math

The world record is 68 feet 9 inches. How far can you spit a watermelon seed? How close to the record did you get? Hold a contest.

What is your favorite room in your house? Estimate the area of a room in your house and then measure to find out how close you were. Try again in a different room.

Read - Full House: An Invitation of Fractions by Dayle Ann Dodds. When cooking her scrumptious dinner Miss Bloom prepared $2 / 3$ of a pound of potatoes and $6 / 8$ of a pound of chicken drumsticks for each person. How many pounds of potatoes and chicken drumsticks did Miss Bloom make?

Speed Multiplication War! Each player turns over a card, first person to say the product of the 2 cards wins. If both say product at the same time then it is a war.

When I played "Speed Multiplication War" 2 cards had a product of 24 . What 2 cards might have been turned over? Could I ever get 17 in this game? Why or Why not? Will more even products come up or more odd products?

Perpendicular and Parallel Hunt! Look around your house and neighborhood for perpendicular and parallel line segments. Predict which you will find more of. Were you right?

Tim Solved a word problem and the correct answer was 7 r2. What are 3 possible word problems Tim could have beensolving?

Roll 2 dice and multiply the numbers. Do this at least 25 times. Keep track of the products using a line plot graph. Do you notice any patterns in the results?

Close to 20! Deal 5 cards to each player (ace=10). Choose 3 of your cards and use any operation ( $\mathrm{x}, \dot{\div},+,-$ ) to get close to 20. Closest to 20 wins that round. Tie everyone wins.

The tallest sunflower in the world grew to be 9 yards tall. How many inches tall is the sunflower? How much taller is the sunflower than you?

What is the sum of the dates of all the Wednesdays in July? Try to solve it mentally? What strategies did you use? Will you get the same answer in August?

A quarter is $1 / 16$ of an inch thick. How many quarters would you have to stack to have a foot high stack? How much would that be worth?

Free choice math activities. Did you do some math activities on your own that aren't listed here?

Identify! Identify and classify angles.acute (less than $90^{\circ}$ ) obtuse (greater than $90^{\circ}$ ), right $\left(90^{\circ}\right)$ in everyday things (buildings, bridges, furniture...)

Happy Birthday USA! The USA declared independence from Great Britain in 1776. How many years ago was that? What year will our nation's sestercentennial?

Cindy went to the beach and collected seashells. When she put them 2 piles, 3 piles, and then in 5 equal piles she didn't have any extra. When she put them in 4 piles she had exactly 2 extra. How many seashells could Cindy have collected?

Toothpick Challenge - Can you make 5 squares out of 12 toothpicks? Can you make 4 triangles out of 9 toothpicks? Make up some of your own.

Aaron is planting a garden in his backyard. The length of the garden is 6 feet and width is 4 feet. What is the area of the garden? What is the perimeter of the garden?

I made 24 water balloons and used a $1 / 2$ liter of water to fill each one. How many milliliters of water did I use to fill all 24 balloons? How about 240 balloons?

A jet travels 400 miles per hour. How far does it travel in $11 / 2$ hours? How much does it travel in $63 / 4$ hours?

A firefly in my backyard glows 23 times every minute. How many times would he glow in 5 minutes? 10 minutes? 1 hour?

Have somebody time you for 2 minutes. Count how many jumping jacks you can do. If you continued at the same pace for an hour how many would that be?

Angle Hunt! Look around your house and neighborhood for thing that form a right angle. Can you find any right angles in nature?

Fold a paper in half. How many sections do you get? (2) Fold it twice you get 4 sections and 3 folds $=8$ sections. How many sections will you get with 4,5 and 6 folds?

Read - Sir Cumference and the Great Knight of Angleland by Creator Neuschwander Cindy. Use this book to measure 5 different angles using a protractor.

Summer Math Fact Challenge - Practice your math facts for 5 minutes 4 times a week in July.

## My child has completed at least 12 of the activities for July.

## Summer Math Students Entering Grade 5 - August

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The next time you are in the car see who can find the license plate that has the highest product when you multiply the digits. What is the product of your car?

Find something small that comes in a larger package such as cereal, pasta or raisins and estimate how many are in the package. How could you check if your estimate was reasonable without counting all? What tools could help you?

At the drive-in movie I noticed that there were 36 cars in equal rows. Can you find all 9 ways the cars could be arranged? Which way do you think is best for a drive-in? Why?

Mystery Number - When I round a number to the nearest 10 it is 450 . When I round it to the nearest 100 it is 500 . When I double my number the 1's digit is a 4 . What's my number?

How close can you get to a bird before it flies away? Try it 10 times and when it flies away keep track of how many steps away you were. Is there a pattern? Are you getting closer?

There are over 200 ways to make exactly $\$ 1.00$ with quarters, dimes, nickels, and pennies! Wow! Can you find at least 10 ways?

Maya tried to do a 360 degree spin jumping off the diving board, but only went $1 / 4$ of the way around. How many more degrees short of her goal was she?

Multiply the numbers on a telephone. What is the product? What strategy did you use? Did you know that ! is a math symbol called factorial? Try to solve 5! Try other factorials.

Go on a 3-D shape hunt in your house and neighborhood. Look for cubes, cones, cylinders, and rectangular prisms? What did you find the most of?

Play a game that you have at home that uses strategy, such as Connect 4, and not just luck. What strategy did you use? What strategy will you use next time?

Toasted Marshmallow Day! There are about 500 mini marshmallows in 1 bag. How many bags would it take to get a thousand? A million? What shape are marshmallows?

Read - Spaghetti and Meatballs for All! By Marilyn Burns. Mrs. Comfort arranges 8 tables and 32 chairs for dinner. Then the guests arrive with their own seating plans! Can shapes with the same area have different perimeters, and vice versa? Use the people, tables and chairs to prove why or why not.

Free choice math activities. Did you do some math activities on your own that aren't listed here?

If you start at the number 1 and double it, then double your answer, and double that answer how high can you go mentally? What if you start at a different number? ${ }^{\text {g }}$

The world's heaviest watermelon weighed in at 268 pounds. Weigh yourself and find out how much heavier the watermelon is than you. Check out the Guinness Book for other records to compare yourself to.

Sandwich Day! Ask 20 people what their favorite sandwich is and make a picture graph. Have each sandwich in your graph equal something other than 1.

Estimate how many words you read this summer with your summer reading books. Discuss how you came up with your estimate with an adult.

NIM! - Start with 13 objects. Each person can take away 1 or 2 items. The person to take away the last object loses. Try it with a different start number

Time yourself to see how many times you can make a hula hoop go around in 2 minutes. How many more or fewer times can you do it if you try again?

How could 2 rectangular gardens with the same area have different perimeters? If their areas are 48 sq . ft . what different perimeters could they have?

Game! 2 players take a card and without looking put it on their forehead. A third person calls the product of the 2 cards. First playertonametheir card become the caller.

How many times can you hop on 1 foot in a minute? If you kept up with that pace how many hops could you do in $1 / 2$ hour? Try your other foot to compare.

Jenny bought 0.18 lb of penny candy. Will bought 0.9 lb of penny candy. Who bought more candy? Explain your reasoning.

The slowest snails move at a speed of about $1 / 3$ inch each minute. How long would it take them to go 1 foot? Could they crawl 1 yard in an hour?


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