

Schuchard Elementary

MATH

ROCKS

Summer Math Activities

For Students Entering Grade 5

Name: _____

Are you ready to have “sum” summer math fun?

You have learned SO much this year! It is important that you keep practicing your mathematical knowledge over the summer to be ready for 5th grade.

Create a personal Math Journal by stapling several pieces of paper together or use a notebook. Be sure to show all your work from the calendar activities in your Math Journal.

Included in this packet:

- * A calendar of activities for the months of July and August. Once you have completed an activity, have a family member initial the box on the calendar.
- * 6 additional activities for you to choose from to complete
- * A list of websites you can use to practice your math skills
- * X-tra Math Summer Log

Don't forget to bring your July and August calendars and activities to school on the first day of 5th grade. The teachers at Schwarzkoff will be so proud of your summer math work!

Happy Thinking!

August

Decimals	#1 Ask an adult to show you the odometer in a car and record the mileage. What does the last number that moves so quickly count?	#2 Find the current batting average for a favorite baseball player. Write the decimal word name for that batting average.	#3 In 2000, the State of Connecticut had 702.9 persons per square mile. What seems funny about that number?	#4 Connecticut has a land area of 4,844.8 square miles. Round that number to the nearest whole number.	#5 The decimal .75 equals the fraction of $\frac{3}{4}$. Think about money. Why does that make sense? Write about it.
Measurement	#6 Watch the weather report for 5 days, recording the daily high and low temperature – for a total of 10 temperatures. Make a Bar Graph.	#7 Ask an adult to share a road map with you. What is the scale for that map? What place is about 60 miles away?	#8 Take a step forward and measure the length of your step from the heel of your front foot to the heel of your other foot in inches. Go for a walk and keep count of how many steps you take. How many inches did you walk?	#9 Complete one of the required activities.	#10 Imagine you plan to put a border all around your bedroom. How much border would you need to buy? Make a drawing. Include your measurements.
Division	#11 Complete one of the required activities.	#12 If you and three friends go to the Mall and spend \$12.40 in all, how much will each of you pay? Use a picture to show your work.	#13 When we simplify a fraction we divide by the Greatest Common Factor. What is the GCF of 15 and 20?	#14 Write and solve a summer story problem for $72 \div 8 = \underline{\quad}$	#15 Your summer camp is going to a Tigers baseball game. If there are 33 kids and 6 kids fit in each van, how many vans do you need?
Time	#16 Find the starting time of a movie. If it takes you 20 minutes to drive to the theater and 25 minutes to get your ticket and popcorn, what time should you leave your home in order to be seated 10 minutes before the movie begins?	#17 Using the movie from yesterday, find the playing time of the movie. What time will it be over so you can get picked up?	#18 Draw a clock to show the time you got up and another clock to show when you had lunch. How much time elapsed?	#19 If you watched a soccer match that lasted 2 hours and 20 minutes, how many total minutes did you watch?	#20 Find today's sunrise and sunset in the newspaper or online. How many hours of sunlight were there today?
Geometry	#21 Neatly cut out the attached tangram set. You will need them to do the activities this week.	#22 Aaron is planting a garden in his backyard. The length of the garden is 6 feet and width is 0 feet. What is the area of the garden? What is the perimeter of the garden?	#23 Using all 7 tangram pieces make ONE of the following shapes: square, rectangle, triangle, parallelogram or trapezoid.	#24 Read <i>Greedy Triangle</i> by Marilyn Burns. Go on a hexagon scavenger hunt. Where can you find hexagons?	#25 Symmetry is all around us in nature and in our home. Find 5 items that have at least one line of symmetry.

Remember - show your work and answers in your Math Journal

Flip It & Multiply

Number of players: 2

Materials:

A deck of playing cards (eliminating the face cards)

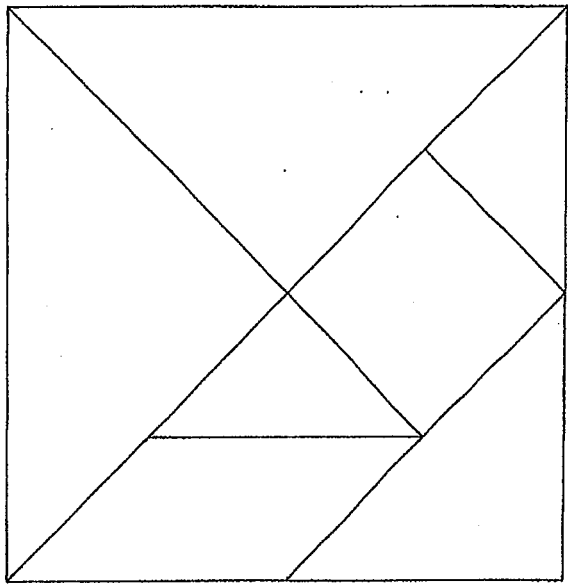
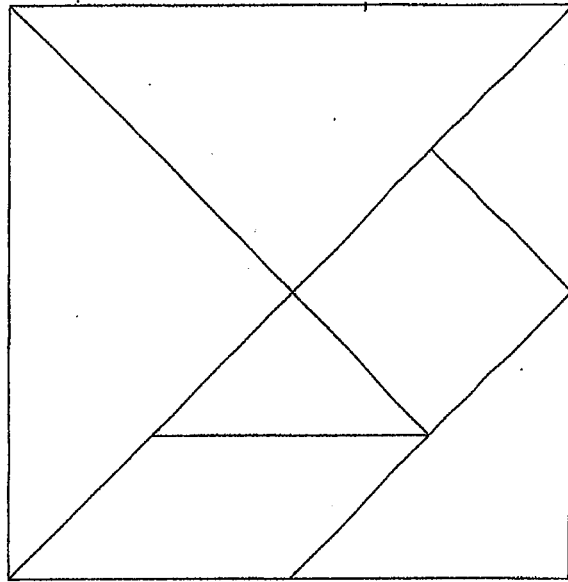
Objective:

The player with the most cards at the end is the winner.

Directions:

1. Mix the cards and deal them evenly to each player. Players place their stack of cards facedown in front of them.
2. Players simultaneously say, "1-2-3 Flip It" and turn over the top 2 cards from each of their piles.
3. Each player finds the product of his or her own two cards. *(For example, if a player flips a 7 and a 8, then the player multiplies 7×8 to get 56.)* Both players call out their products.
4. The player with the greatest product takes all four cards and places them in a separate pile. *(For example, if player one flips a 9 and 3 and player two flips a 6 and 7 then player two is the winner of that hand because $42 (6 \times 7)$ is greater than $27 (9 \times 3)$).*
5. Play continues until all cards in the pile have been flipped or until time runs out.
6. If both players have the same product, then the players flip 2 more cards each. The player with greatest product keeps all 8 cards.

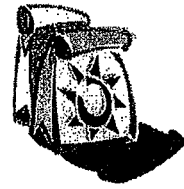
Tangrams



Choose 4 activities of the following activities.

Activity #1:

What's in the Bag?



Ask a family member or friend to put 30 coins (pennies, nickels, dimes, and quarters) into a paper bag to conduct this experiment.

Step 1: Without looking into the bag, pull a coin out and record the type of coin in the tally chart below.

Step 2: Return the coin to the bag.

Step 3: Take turns doing this until each of you has done this 20 times.

Pennies	Nickels	Dimes	Quarters
Total:	Total:	Total:	Total:

Step 4: Use the results to make a prediction of how many of each coin are in the bag.

Pennies _____ Nickels _____ Dimes _____ Quarters _____

Explain how you made your prediction

Step 5: Look into the bag and count the actual number of pennies, nickels, dimes and quarters to check your prediction. Was your prediction accurate? Explain.

Activity #2:

Take A Survey!



Conduct a survey by asking at least 20 friends and family members a question. You may accept any response offered or you may create 5 – 7 responses from which to choose. Record your data in a tally chart.

Step 1: Think of a question you would like to ask for your survey.

Step 2: Create a tally sheet.

Step 3: Using the data collected, create a bar graph or pictograph.

Step 4: Write a paragraph about your findings.

Step 5: Write two questions that can be asked using the data.

Activity #3:

How Much Paint?

Summer time is a good time to paint. How many pints of paint will you need to paint a room in your home?

Step 1: Estimate the total area of the walls in a room in your house. (Hint: measure the length of each wall to the nearest foot, measure the height of the room to the nearest foot; multiply the length and height of each wall to find the area)

Wall 1: Length _____ Height _____ Area: _____

Wall 2: Length _____ Height _____ Area: _____

Wall 3: Length _____ Height _____ Area: _____

Wall 4: Length _____ Height _____ Area: _____

Total Area: _____

Step 2: A pint of paint will cover 50 square feet. How many pints of paint will you need to paint the room in your house? Show how you figured it out.

Activity #4:

What are the chances?

Play this game the next time your family is outdoors or taking a car trip.

Step 1: Choose three colors of cars.

Step 2: Make a Prediction: How many cars of each of these colors will you see in the time it takes 50 cars to pass?

Step 3: Conduct an experiment:

1. Count as cars pass and record a tally mark under the appropriate color
2. After you have observed 50 cars, find the totals.
3. Write the probability of each color car out of 50 and compare with your predictions.

Step 4: Predict how many times you would see the 3 colors of of 100 cars.

Activity #5:

Play Ball

A baseball player's batting average compares a player's times at bat with the number of hits. To compute a batting average, divide the number of hits by the at bats. The result will be a decimal, the higher the decimal the better the average.

Look in the sports section of your newspaper to find the batting averages of your child's favorite baseball player. Keep track of the player's at bats and hits for 7 days. Compute the batting average using the formula above.

Day	Number of Hits	Number of at Bats
One		
Two		
Three		
Four		
Five		
Six		
Seven		

Activity #6:

Miles to Go

1. Plan an out of town trip.
2. Using a map; highlight the route of your trip on a map.
3. Measure the distance from your home to the destination in either inches or centimeters.
4. Use the map scale to calculate the number of miles you will travel.

Math Websites

At the time this list was created, the websites listed were checked by teachers and deemed child appropriate. However, parents should always monitor their child's use of any Internet site. You can also Google many other online math games!

- www.xtramath.org
- www.xpmath.com
- www.mathisfun.com
- www.funbrain.com
- <http://www.math-play.com/Middle-School-Math-Games.html>
- www.multiplication.com
- www.aaamath.com
- <https://sites.google.com/site/gameonlearning/math-middle-school-games>