

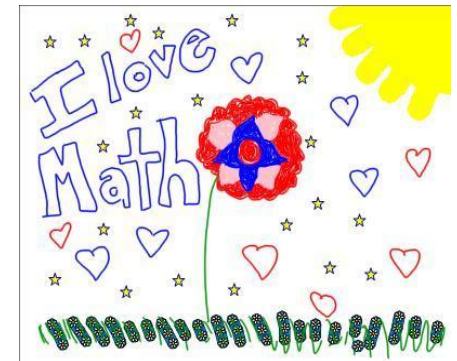
Summer Math Learning Packet

Students Entering Grade 3

Discover mathematics all around you this summer!!! Just as with reading, regular practice over the summer with problem solving, computation, and math facts will maintain and strengthen the mathematical gains you made over the school year.

Attached to this letter, you will find creative mathematics activities to explore at home. The goal is for you to have fun thinking and working collaboratively to communicate mathematical ideas. While you are working, ask how the solution was found and why a particular strategy was chosen.

The Summer Math Learning Packet consists of 2 calendar pages, one for July and one for August, as well as directions for math games to be played at home. Literature and websites are also recommended to explore mathematics in new ways. We encourage you to complete at least 15 math days each month. Keep track of your math in a journal.



Fun math books to read	Fun websites to explore
<p><u>Amanda Bean's Amazing Dream</u> by Cindy Neuschwander <u>The Greedy Triangle</u> by Marilyn Burns <u>Measuring Penny</u> by Loreen Leedy <u>Math for all Seasons</u> by Greg Tang</p>	<p>www.funbrain.com www.aplusmath.com www.pbskids.org https://illuminations.nctm.org/ www.setgame.com www.multiplication.com Investigations Math Games Investigations Math Words and Ideas Math At Home- The Learning Center Math Playground Virtual Manipulatives More Virtual Manipulatives Which one does not Belong</p>

Student Accountability

The intention is that your child spends at least 10 minutes a day, 4 to 5 times a week, practicing math. Your child should aim to complete at least 200 minutes of math practice over the course of the summer. When your child has completed the math requirements, please sign and return this paper to the third grade teacher with his/her journal.

Boston Public Schools Summer 2022

Some of these activities have been adapted from materials developed by Cambridge and Brookline Public Schools

Parent's signature

Date

Grade 3

Summer Math Ideas

DIRECTIONS: Do your best to complete as many of these summer math activities as you can! Record your work in your math journal every day. In September, share your Math Journal with your third grade teacher.

Each journal entry should

- Have the date of the entry
- Have a clear and complete answer
- Be neat and organized

Math Tools You'll Need:

- Notebook for math journal
- Pencil
- Chalk
- Regular deck of playing cards
- Coins
- Dice

Here is an example of a "Great" journal entry:

July 5th: Today I found 3 different ways to make \$1.00. First I used 3-quarters, 2-dimes, and 1-nickel to total \$1.00. Next, I had 5-dimes, and 2-quarters, and this also totaled \$1.00. Finally, I had 2-quarters, 2-dimes, and 6-nickels. These are the three different ways I combined coins to make \$1.00.

Games To Play (You will need a deck of cards)

Compare- Addition and Subtraction

Pass out all the cards to players. Each player flips over two cards. Add or subtract the two numbers showing. Players compare their values and the person with the higher value wins all four cards.

Close to 100

Deal 6 cards to each player. Use any 4 of your cards to make two 2-digit numbers.

(Aces = 1; Jacks, Queens, & Kings = WILD cards, and stand for any digit 0-9) Try to make a combination, that when added, is close to, or exactly 100. **5 4 3 Ace 8 3**

You combine 48 and 53 to make 101. Your score is 1, since the difference between 101 and 100 is 1. You make a recording sheet in your journal like this:

Round 1: $48 + 53 = 101$

Score: 1

Put the cards you used in the discard pile. Keep the other two for the next round. Pick up four more cards, and play 5 rounds. Add the score to each round. The lowest score after 5 rounds wins.

Other games to play: Checkers, Othello, Memory, Set, jigsaw puzzles, Parcheesi, Crazy Eights, Connect Four, Legos, etc.

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July 2022 Entering Third Grade Mathematics Calendar

Day 1	Day 20	Day 3	Day 4	Day 5
Explore one of the recommended websites. What math did you learn?	Write all the numbers from 1-100 by 3's. What patterns do you see?	How many cents do I have if I have 1 quarter, 2 dimes, 2 nickels, and 3 pennies? Show that value with different coins.	How many times can you hop on your left foot in a minute? Your right foot? Compare the number of hops using the symbols <, >, or =.	Think about your schedule for the day. What will you do? Create a schedule to record your activities between 7am- 2pm.
Day 6	Day 7	Day 8	Day 9	Day 10
Plant a seed. will it grow to be about 12 inches or 12 feet? How do you know?	Play a strategy game like Othello or Checkers . Did your strategy work? Will you try a different strategy the next time you play?	Practice counting forward and backwards by 2's, 5's, and 10's from any number. Can you do it jumping on one foot?	List the months of the year in order starting with the first month of the year.	Put away the leftovers from dinner, how do you make decisions about the containers you will use?
Day 11	Day 12	Day 13	Day 14	Day 15
Find a flower with an odd number of petals. Do all flowers have the same number of petals?	Read Measuring Penny by Loreen Leedy. Find an animal real or stuffed to measure with standard and non-standard measurement.	Make a rectangular prism using toothpicks and marshmallows. What other 3-D shapes can you make?	Add the ages of all the people who live in your house. What is the sum?	2 groups of 2= 2 groups of 3= 2 groups of 4= 2 groups of 5= What's your strategy?
Day 16	Day 17	Day 18	Day 19	Day 20
Using sidewalk chalk write as many number facts you now in one minute.	I am thinking of an odd number. It is greater than 33 and less than 40. You say it when you skip count by 5s. What number am I?	Find at least 3 different ways to make \$1.00 using nickels, dimes, and quarters.	In California it is 3 hours earlier than it is in Boston. What time will it be in California when you eat lunch? When you go to sleep?	Read Amanda Bean's Amazing Dream by Cindy Neuschwander. Counter all of the books in your house.
Day 21	Day 22	Day 23	Day 24	Day 25
Think of a special day you are looking forward to. How many days until that special day? How many weeks?	If 125 is the answer, what could the question possible be? Challenge yourself to think of more questions.	If Mia painted 400 finger nails, how many people did she see?	Write the numbers below in expanded form for. (Ex. $583 = 500+80+3$) 729 846 295	Read, Math for All Season by Greg Tang. Make up your own math riddle.

August 2022 Entering Third Grade Mathematics Calendar

<p>Day 1</p> <p>Palindromes are numbers that are the same forward and backwards (example 121). Find a palindrome in real life.</p>	<p>Day 2</p> <p>Play Hidden Picture Subtraction</p> <p>www.aplusmath.com</p>	<p>Day 3</p> <p>Flip a coin 10 times and record your results. Flip the coin another 10 times. Compare the results. What do you notice?</p>	<p>Day 4</p> <p>$15 + 6 = 13 + \underline{\quad}$</p> <p>Copy this problem in your journal and fill in the blank. Explain how you got the answer.</p>	<p>Day 5</p> <p>If you start playing a game at 8 a.m. and play for 1 and a half hours, what time is it when you're done? How do you know?</p>
<p>Day 6</p> <p>Read, <u>The Greedy Triangle</u> by Marilyn Burns.</p> <p>Follow along using toothpicks to make the polygons.</p>	<p>Day 7</p> <p>Create a survey for favorite day of the week. Ask at least 20 people. Make a chart of the results</p>	<p>Day 8</p> <p>Write the numbers below in expanded form. (Ex. $583 = 500 + 80 + 3$)</p> <p>109 989 240</p>	<p>Day 9</p> <p>Use a grocery store flyer to plan a breakfast. List all the items you need and record the price of each item. How much will breakfast cost?</p>	<p>Day 10</p> <p>Do a Sudoku puzzle in the newspaper.</p>
<p>Day 11</p> <p>What are three ways you can estimate what time it is other than using a clock? Use one way and estimate the time, how close are you?</p>	<p>Day 12</p> <p>Play Guess My Rule</p> <p>www.mathplayground.com</p> <p>Did you learn new math vocabulary?</p>	<p>Day 13</p> <p>Estimate how long it will take you to do 100 jumping jacks. Did it take more or less than 5 minutes? Record your time and compare with a friend.</p>	<p>Day 14</p> <p>Set the table for supper. Find the total number of plates, glasses, forks, knives, and spoons. Draw a picture of the table.</p>	<p>Day 15</p> <p>Play Building Blocks</p> <p>www.mathplayground.com</p> <p>Describe how you see the shapes fitting together.</p>
<p>Day 16</p> <p>$19 - 6$ $18 - 6$ $17 - 6$ $16 - 6$</p> <p>What is your strategy?</p>	<p>Day 17</p> <p>Writing down the years people who live with you were born. Put them in order from least to greatest.</p>	<p>Day 18</p> <p>Find the totals: 3 groups of 5 4 groups of 5 5 groups of 5 6 groups of 5 7 groups of 5 What is your strategy?</p>	<p>Day 19</p> <p>If Summer is 93 days long, about how many weeks is that? How many days are left?</p>	<p>Day 20</p> <p>YOU DID IT! Please bring your journal to your third grade teacher on the first day of school.</p>