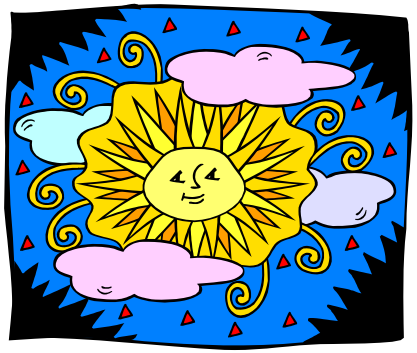
Summer Enrichment Packet
Rising Math Grade 3 Students



Prince George's County Public Schools
Division of Academics
Department of Curriculum and Instruction

You have learned so much in math this year! This packet is a compilation of important mathematical concepts and skills that you are expected to know prior to moving to the next level and exposure to new items for the upcoming year. These examples focus on both mathematical skills and problem solving. While you may use calculators and other tools as needed, be prepared to explain the reasoning behind your answers. Some problems require answers from previous activities, but overall you may do the problems in any order or any day that you choose. Create a math journal by stapling sheets of paper together or use a notebook to show your work.

A list of suggested books and resources needed are included at the end of each grade level.

Have a happy and safe summer!

Prince George's County Mathematics

√M powers!

Manipulatives-Modeling-Monitoring-Mastery

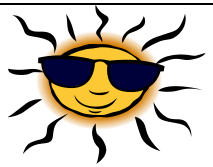
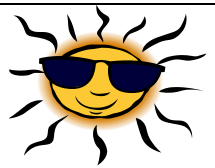
Rising Math Grade 3 Students

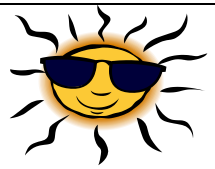
Some indicators that students leaving Grade 2 should be able perform include, but are not limited to:

- **Fluently adding and subtracting within 20**
- Use properties of addition and subtraction
- Demonstrate an understanding of whole number place value
- Add and/or subtract any whole numbers
- Measure and estimate lengths in standard units
- Work with time and money
- Represent and interpret data
- Reason with shapes and their attributes

Throughout the summer, **practice basic addition, subtraction, and multiplication facts**. Practice using strategies to build number sense (doubles, doubles + 1, making 10, etc.).

Be sure to check out our enrichment math lessons on **PGCPS TV (Comcast Channel 96/Verizon Channel 38)** beginning July 1st!

Week 1				
Solve these problems: **187 + 10** **187 + 20** **187 + 30** **187 + 40** **187 + 50** **187 + 60** **187 + 70** **187 + 80** **187 + 90** **187 + 100** **Show one of the problems on a number line.**	**Partition the rectangle below into 2 equal parts.**  **What are the parts called?**	**Read a book from the math book list. Record the time you start reading. Use a.m. or p.m. correctly.**	**What is the largest sum of two single digit numbers? Practice all basic subtraction facts with 18 as the largest minuend and differences that are a single digit number. Practice throughout the summer.** ***<u>Minuend-subtrahend=difference</u>*** **18 - 8 = 10**	**Look on a calendar to see the dates for this week. Which has the greater sum: the dates for Monday and Friday of this week or the dates for Tuesday and Thursday of this week? Explain your answer. What did you observe about these addends?**
Week 2				
What is the difference between Monday of this week and Monday of last week? Tuesday of this week and Tuesday of last week? What do you observe about these problems? What will cause a break in the observed pattern?	**Write a time schedule for your activities today. Start with the time you wake. Do not forget to use a.m. or p.m.**	**Solve these problems:** **225 + 100 =** **225 + 200 =** **225 + 300 =** **225 + 400 =** **225 + 500 =** **225 + 600 =** **225 + 700 =** **Show one of the problems on a number line.**	**Partition the rectangle below into 4 equal parts.**  **What are the parts called?**	
Week 3				
Solve these problems: **725 – 100 =** **725 – 200 =** **725 – 300 =** **725 – 400 =** **725 – 500 =** **725 – 600 =** **725 – 700 =** **Show one of the problems on a number line.**		**Use a timer to determine how long it takes you to write all of the addition facts with a sum of 20. Practice to get a better time next week.**	**Write a word problem that uses repeated addition and the sum is 18.**	**Marla drew 3 rows of stars with 4 stars in each row. What is the repeated addition equation that could show this problem? How could she continue this pattern to show 28 stars? What is the new addition equation?**

Week 4				
Write the numbers 1 through 9 on squares of paper. Create a 3 x 3 square using the 9 numbers so that all the columns, rows, and diagonals add up to 15.	Palindromes are words or numbers that read the same from right to left and left to right. How many 2-digit palindrome numbers exist? List them. What pattern do you see?	Which coins did Tina use if she paid for a $0.83 candy bar with 9 coins?	Read a book from the math book list. Record the time you start reading. Use a.m. or p.m. correctly.	
Week 5				
Jack's beanstalk was 3 centimeters high when he measured it on July 17. On July 18, the beanstalk was 6 cm high. The beanstalk doubles its height every day. What will be the height on July 22?	Talia's garden is the shape of a regular polygon with a perimeter of 36 yards. Draw at least three different shapes that the garden could be and label the lengths of the sides using only whole numbers. *All sides are the same length in a regular polygon.*	Read a math book from the attached list of books. Record the time you stop reading. Use a.m. or p.m. correctly.	200 +40 +3 = ?	Remove the face cards from a deck. Aces count as 1. Turn the cards face down and turn the first card up to be your target number. See the Resource Sheet for how to play Target.
Week 6				
How many popsicles are in 2 ½ dozen?	Milo owns a flower shop. He can buy 3 flowers for 15¢ and then sell each one for 10¢. How much money will he make if he buys and sells 12 flowers? Explain your answer.	Use the digit 3, 4, and 9 to write the largest even number that you can. Is this the largest number that can be made with these three digits? Explain your answer.	A toy costs 65¢. Rae buys the toy and gets 10¢ back in change. What three coins did Rae use to pay for the toy?	Read a book from the math book list. Record the time you start and stop reading. Use a.m. or p.m. correctly.

Week 7				
Practice subtraction facts today for 15 minutes.	**List at least 3 different words that mean two. Now write a story problem using those words. You may write more than one problems.**	**Pat had a birthday on January 11. He is 6 years older than his sister. His sister was born on January 23, 2008. How old is Pat?**	**Read a book from the math book list.**	**Create a math story problem based on the book you read from the math book list.**
Week 8				
Find a flyer from any supermarket. Show how you could spend $5.00 on three or more items. Cut out the items and prices to show the total spent.	**Which Costs More?** **Compare the cost of two uniforms (outfits) for school against the cost of a new game for a game system. Use the newspaper or computer to research the costs. Write a description of your findings.**	**Scruffy the cat usually sleeps 5/12 of the entire day. How many hours does she sleep? Hint: How many hours in a day? Draw a picture to help you find your answer.**	**How many stars can you draw in a minute? Write an estimate first. Now ask someone to time you as you complete the experiment. Was your estimate or actual number drawn higher? Based on your actual for a minute, how many could you draw in ½ hour? How did you get your answer?**	**Read a book from the math book list. Record the number of minutes you read today.**

Suggested Math Reading for Primary Grades

Title	Author
1. 12 Ways to Get to 11 (Addition)	Eve Merriam
2. A Fair Bear Share (Subtraction)	Stuart J. Murphy
3. Animals on Board (Addition)	Stuart J. Murphy
4. Domino Addition	Lynette Long
5. Mission: Addition	Loreen Leedy
6. Pizza Counting (Addition)	Christina Dobson
7. Two of Everything (Doubling)	Lily Toy Hong
8. Actual Size (Measurement)	Steve Jenkins
9. Betcha! (Estimation)	Stuart J. Murphy
10. Count on Pablo	Barbara deRubertis
11. Fish Eyes: A Book You Can Count On	Lois Ehlert
12. From One to One Hundred	Teri Sloat
13. Two Ways to Count to Ten: A Liberian Folktale	Ruby Dee
14. What Comes in 2's, 3's, & 4's?	Suzanne Aker
15. Ten Black Dots	Donald Crews
16. The Man Who Counted: A Collection of Mathematical Adventures	Malba Tahan
17. Fraction Action	Loreen Leedy
18. Eight Hands Round (Shapes)	Ann Whitford Paul
19. Apple Fractions	Jerry Pallotta
20. Fraction Fun	David A. Adler
21. Math in the Bath	Sara Atherlay
22. Place Value	David Adler
23. Big Ideas for Small Mathematicians: Kids Discovering the Beauty of Math	Ann Kajander
24. Whole-y cow!: Fractions are Fun	Taryn Souders
25. The Great Graph Contest	Loreen Leedy

26. One Foot Two Feet: An Exceptional Counting Book	Peter Maloney
27. Earth Day-hooray	Stuart Murphy
28. Let's Make a Bar Graph	Robin Nelson
29. I See A Pattern Here	Bruce Goldstone
30. Beep Beep, Vroom Vroom!	Stuart Murphy
31. The Sunday Scoop	Stuart Murphy
32. Place Value Level 2 Practice Pages and Easy-to Play Learning Games for Base-ten number concepts	April Duff
33. **Math for Children Measurement	Publisher Schlessinger Media
34. **Einstein's Math Video Tutor: Volume Two ages 5-7	Publisher Penton Overseas
35. **Einstein's Math Video Tutor: Volume Three ages 7-9	Publisher Penton Overseas