

Summer Math & Literacy Practice Getting Ready for Grade 3

Dear Parents,

Congratulations on the completion of a wonderful school year with your child. Your partnership with your child's teacher is among the biggest factors in their success. As we look ahead to the summer break, we want to continue that partnership and ensure all students will find time to enjoy some pleasurable reading writing, and math activities during the break.

Research has shown that over the summer months students often regress in their academic skills by one month or more. Each year, considerable instructional time is spent reviewing skills and knowledge lost over the summer months. The summer learning effect has been observed in schools around the world and can contribute to a widening gap in achievement over time. This data reinforces the importance of reading and practicing Math and Literacy skills over the summer holiday. For this reason, we have created calendars with fun Math and Literacy activities for your child to complete over the summer months.

These summer activities will enable your child to review concepts and reinforce skills learned during the past school year. The work they do over the summer will be turned in to your child's teacher and reviewed in class during Group Share and Evaluation time at the start of the school year.

In Grade 2, instructional time in math focused on four critical areas:

1. Extending understanding of base ten notation (place value)
2. Building fluency with addition/subtraction
3. Using standard units of measure
4. Describing and analyzing shapes

In Grade 2, instructional time in Literacy focused on:

1. Developing strategies to support independent reading comprehension, fluency, and accuracy
2. Engaging in the writing process using the 6+1 traits
3. Strengthening and widening vocabulary and word knowledge

Just a few minutes each day spent thinking and talking math and practicing literacy skills will help reinforce the learning that has happened over the past year and will build the foundation for the skills and concepts that will be developed during the upcoming school year. This summer learning packet consists of 2 calendar pages, one for July and one for August.

Literature and websites are also recommended to explore mathematics and literacy in new ways. While your child is working on math problems, discuss the math concept being targeted. Your child should aim to complete at least 15 math days each month as well as weekly literacy prompts. Additionally, students should be reading individually or with a parent at least 30 minutes a day!

***Please have your child highlight which math problems they did on the attached calendar pages and be prepared to turn in a notebook showing their calendar math and literacy work upon return to school on September 2, 2019.**

Parent Tips for Supporting Your Child with Summer Work

In order for your child to benefit from summer work, they should space the practice work out over the summer, opting to do a little bit each week rather than all of it at once at the beginning of summer or right before returning to school in August.

Tips for Helping Your Child with Literacy:

- Help your child choose books that they can read without much help. While they are reading, help them do the following:
 - Encourage your child to use pictures and decoding strategies to help identify unknown words.
 - Match one-to-one (pointing to a word while saying it) consistently.
 - Re-read familiar books to help build fluency.
 - Encourage your student to read in phrases and not just word for word.
 - Talk about what is happening in the illustrations or photographs.
 - Recall some events in a story.
 - Help connect the reading to your child's life or other books that they've read.
 - Echo read a text to help with fluency and comprehension.
- While they are writing, help them to:
 - Practice sounding out words they want to say phonetically.
 - Enrich their writing with details and strong vocabulary.
 - Encourage your student to review their writing and make appropriate changes.

Tips for Helping Your Child with Math:

- Expect your child to work hard and be good at math.
- Ask "How did you get that?" "Can you show me another way to do that?" "Remember how you did _____, see if you can use that same strategy."
- Encourage your child to stick with a task even if it seems challenging.
- Highlight the math in everyday activities, such as cooking, shopping, and playing sports.
- Play math games like Yahtzee and Monopoly. Playing with blocks and completing jigsaw puzzles are great ways to help reinforce spatial skills and look for patterns.
- If you see signs of frustration, suggest leaving the problem for a day or two and returning to it with fresh perspective at another point.
- Listen carefully to how your child is thinking about math.
- Let them figure it out themselves by asking questions without telling them what to do. Here are some great conversation prompts as your child works through their summer math.

In the beginning....

What do you know?
What do you need to find out? How might you begin?
What should you do first?

While working....

How can you organize your information?
Can you make a drawing to explain your thinking?
What would happen if...?
What do you need to do next?
Do you see any patterns? Any relationships?
Can you predict...?
Does this remind you of any other problems you've done?

Reflecting on Solutions...

Is your solution reasonable?
How did you arrive at your answer?

Can you convince me that your solution makes sense? What did you try that didn't work?

Responding...

Your response is as important as your initial question. Continue to discuss problems even after children have their answer. This will give your child a chance to clarify thinking and make more connections.

You can ask:

How do you know that your answer makes sense?
Do you know another way to solve this?
Do you think there is more than one answer? How could we find out?

Special Thanks to Project Aero and Ms. Erma Anderson for the Summer Math Calendars

JULY MATH PRACTICE

	Monday	Tuesday	Wednesday	Thursday	Friday	
	1) Write all the addition facts that equal 10.	2) How many different ways can you cut a sandwich to show fourths?	3) Set out 4 bowls. Put 5 objects in each bowl. Write an addition sentence to show how many objects are in the 4 bowls.	4) Skip count by 2s, 5s, and 10s to 100. Write each pattern on your paper.	5) One way to make 12 is $8 + 4$. Write 4 other addition facts for 12.	6
Literacy Prompt week of July 1: What would be the best book to take with you on vacation? Start with a hook. State your opinion, give three reasons with evidence for your choice, and then finish with a closing sentence.						
7	8) Look in your refrigerator. Categorize the items as dairy, fruit, vegetable, meat and other. Make a tally chart to explain your findings. Use words to summarize the tally chart.	9) Go on a Shape Hunt around your house! Look for items shaped like a square, rectangle, and triangle. Draw and label the items.	10) Using the numbers 63, 18, 30, 49, Which two numbers would you add to get the greatest sum? Add them together. Which two numbers would you add to get the smallest sum? Add them together.	11) What number is one more than 87? What number is one less than 87? What is 10 more than 87? What is 10 less than 87? What is 100 more than 87?	12) Jason swims in the pool from 1:10 p.m. to 1:45 p.m. Draw a clock to show the time at which he began to swim. How long did he stay in the pool?	13
Literacy Prompt week of July 8: What is one food or drink that you made or helped someone make this summer? Write directions to teach someone how to make it.						
14	15) Find many different coins. Sort the coins into groups of the same kind. What is the value of each group?	16) Draw a picture of the windows in your house. Describe their shape. Are they partitioned into equal shares? If so, how are they partitioned?	17) Susan emptied her pockets. To her surprise she found 1 quarter, 2 dimes, and 1 nickel. How much money does she have? Draw a picture to justify your answer.	18) What time did you go to bed last night? What time did you get up this morning? Draw 2 clocks and show these times. BONUS! How many hours did you sleep?	19) Create a timeline for yesterday beginning at the time at which you woke up and ending at the time you went to bed. Include at least 8 events on your timeline.	20
Literacy Prompt week of July 15: Write a pretend letter to a friend or family member. Tell them about a book you read and if you recommend it. If it is a fiction book, write about the characters, the setting, the problem, and the solution. If it is a nonfiction book, write about the main idea and three interesting facts you learned. Make sure to include the greeting and closing to your letter.						
21	22) Using coins, show 2 ways to make 25¢, 40¢, and 78¢.	23) Create 5 different ways to show \$1.00 using quarters, dimes, and nickels.	24) Solve the problems below. Then write a story problem to match the equations. $18 + 26 =$ $29 + 17 =$	25) Write the missing numbers on the lines below to continue the patterns: 12, 15, 18, ____, ____, ____ 8, 12, 16, ____, ____, ____	26) Write these numbers from least to greatest: 7, 49, 3, 98, 59, 22	27
Literacy Prompt week of July 22: Write a poem about what you might see while walking along the beach. Draw a picture to accompany your work.						
28	29) Order the numbers from least to greatest: 49, 7, 22, 98, and 3 Underline the odd numbers. What is the value (sum) of the odd numbers?	30) Find a place outside where you can observe creatures. Watch for 10 minutes. Record what you see. Create a bar graph to show your data.	31) Fold a piece of paper in half 2 times. Open it. How many rectangles? Now fold it in half again. How many rectangles? Fold it again. How many rectangles?	Fun Websites to explore: https://www.funbrain.com/ https://www.nctm.org/illuminations/ http://playkidsgames.com/ http://figurethis.nctm.org/ https://www.coolmath4kids.com/		

AUGUST MATH PRACTICE

	Monday	Tuesday	Wednesday	Thursday	Friday	
				1) Use coins to count back the change you would get if you bought candy for 48¢ and paid with \$1.00.	2) Write the addition and subtraction fact families for the following sets of numbers: 3, 5, and 8 23, 9, and 14	3

Literacy Prompt week of July 29: Write a nonfiction text about your favourite summer sport, food, or activity, etc. Give at least three facts and make sure to write an interesting beginning and ending.

4	5) Write down the years each person in your house was born. Order the numbers from least to greatest.	6) Sami went to the store and bought 3 toys. Each toy cost 1 quarter. How much money did her 3 toys cost?	7) Draw a picture to show equal shares of fourths. Then, draw a picture to show equal shares of thirds.	8) What is the value of the number in the tens place in each number? 63, 783, 419, 578	9) A small pack of gums has 5 pieces. How many pieces of gum will I have if I bought 3 packs? 5 packs? 8 packs? Explain your thinking.	10
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Literacy Prompt week of August 5: Describe what your dream tree-house would look like. What types of things (slides, TV, kitchen, etc) would it include?

11	12) The movie starts at five minutes after 11. Write the time the movie starts. Draw a clock to show the correct time. Where is the minute hand?	13) Jessica spent 82¢ on a milk shake. She gave the cashier \$1.00. How much change will she get back?	14) What math tool would be best for measuring the length of a: a. Book b. Car c. Shoe d. Height of a door	15) 2 groups of 2 = 2 groups of 3 = 2 groups of 4 = 2 groups of 5 = 2 groups of 6 = Continue to 2 groups of 10. What strategy did you use?	16) Today's number is 74. Add 2 numbers to get the sum of 74. Subtract 2 numbers to get the difference of 74.	17
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Literacy Prompt week of August 12: Would you rather live on a boat or on a plane? Why? Give three reasons to support your opinion.

18	19) Use symbols (<, =, >) to compare the number sentences: 578 _____ 396 390 _____ 387 975 _____ 759	20) Next year our school will have six hundred thirty-nine students. Write the number in standard form and expanded form. Can you count by 10s from this number to 699?	21) Draw a rectangle. Partition the rectangle into 3 rows and 4 columns.	22) My special machine adds 5 to each new number. What numbers comes out of my machine if I put in a: 12? 19? 46? 87?	23) Ask three people their phone number. Write down each number. Whose phone number has the highest value?	24
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Literacy Prompt week of August 19: Recipe for a summer poem: One teaspoon of _____, one cup of _____, two gallons of _____, etc. Illustrate your recipe

25	26) Write the number four hundred thirty-three. Skip count by 10s starting at this number to 493.	27) Name three activities you did yesterday. What time did you do each activity? Draw a picture of each activity and write a.m. or p.m. for each activity.	28) 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?	29) How many times can you fold a piece of paper in half? Predict and try. Try it with 4 different sizes of paper. Can you make the same number of folds with all sizes?	30) Read a book about math. (There is great list attached to this calendar.)	31
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Literacy Prompt week of August 26: What three things are you hoping to learn in grade 3? Why?



SUMMER MATH HOMEWORK SELF-ASSESSMENT RUBRIC				
	Exemplary	Proficient	Beginning	Needs Improvement
Completion	I completed more than 35 math calendar problems this summer.	I completed 30-35 math calendar problems this summer.	I completed fewer than 30 math calendar problems this summer.	I did not complete any math calendar problems this summer.
Pacing	I spent time working on calendar math problems weekly.	I usually worked on calendar math problems weekly.	I did not space out my calendar math problems weekly over the summer.	I did not complete any math calendar problems this summer.
Quality & Neatness of Work	I kept a notebook; I labelled each problem clearly; I showed my work neatly; I clearly identified my answers.	I kept a notebook; I usually labelled each problem; I sometimes showed my work; I sometimes identified my answers.	I did not keep a notebook; my work was done on scratch paper; I did not always show my work; I did not clearly identify my answers.	I did not complete any math calendar problems this summer.
Accuracy	My answers to summer math problems were more than 90% accurate.	My answers to summer math problems were 80-89% accurate.	My answers to summer math problems were 70-79% accurate.	My answers to summer math problems were less than 70% accurate.

SUMMER LITERACY HOMEWORK SELF-ASSESSMENT RUBRIC				
	Exemplary	Proficient	Beginning	Needs Improvement
Completion	I responded to more than 7 reading prompts this summer.	I responded to 5-7 reading prompts this summer.	I responded to fewer than 5 reading prompts this summer.	I did not respond to any reading prompts this summer.
Pacing	I spent time working on my reading prompts this summer.	I usually worked on calendar reading prompts monthly.	I did not space out my calendar reading prompts weekly over the summer.	I did not respond to any reading prompts this summer.
Quality & Neatness of Work	I kept a notebook; my handwriting is very neat; if I included a picture, it is carefully and neatly done and entirely matches the text.	I kept a notebook; my handwriting is legible; if I included a picture, it is nicely done and matches my text.	I did not keep a notebook; my work was done on scratch paper; my handwriting is barely legible; if I included a picture, it is a bit rushed and does not entirely match the text	I did not respond to any reading prompts this summer.
Ideas and Content	I was able to respond to all of the reading prompts; I provided great details to support my opinion; my thoughts were narrow and to the topic.	I was able to respond to most of the reading prompts; I included some details to support my opinion; my thoughts were a bit generic.	I was not sure how to respond to most of the reading prompts; I didn't have many details to my answer; my thoughts were repetitive.	I did not respond to any reading prompts this summer.

Suggested Reading List - Grade 3 Math

Please note: This is a suggested list to read aloud or have your child read independently. Parents may wish to preview content to ensure appropriateness for their children.

<p>Sayre, April Pulley, One Is a Snail, Ten Is a Crab: A Counting by Feet Book Viorst, Judith, Alexander, Who Used to Be Rich Last Sunday Hopkins, Lee Bennett, Marvelous Math: A Book of Poems Zaslavsky, Claudia, Math Games and Activities from Around the World Axelrod, Amy, Pigs Will Be Pigs: Fun with Math and Money Burns, Marilyn, The \$1.00 Word Riddle BookThe Greedy Triangle, Spaghetti and Meatballs for All!: A Mathematical Story Friedman, Aileen, The King's Commissioners Adler, David A., How Tall, How Short, How Far Away Briggs, Raymond, Jim and the Beanstalk Leedy, Loreen, Measuring Penny, Fraction Action</p>	<p>Myller, Rolf, How Big Is a Foot? Giganti, Paul Jr., Each Orange Had 8 Slices Hong, Lily Toy, Two of Everything: A Chinese Folktale Pinczes, Elinor J., One Hundred Hungry Ants Anno, Mitsumasa, Anno's Math Games, Anno's Magic Seeds Hutchins, Pat, The Doorbell Rang McMillan, Bruce, Eating Fractions McKissack, Patricia C., A Million Fish ... More or Less Nolan, Helen, How Much, How Many, How Far, How Heavy, How Long, How Tall is 1,000? Wells, Robert E., Counting on Frank, Is a Blue Whale the Biggest Thing There Is? What's Smaller Than a Pygmy Shrew?</p>
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Suggested Reading List - Grade 3 Literacy

Please note: This is a suggested list to read aloud or have your child read independently. Parents may wish to preview content to ensure appropriateness for their children. **All of the following titles are available in the AISC Library. Call numbers are included below.**

<p>Ackerman, Karen; Song and Dance Man; E Ack (Caldecott) Adler, David; Cam Jansen and the Mystery of the Dinosaur Bones; MF Adl Averill, Esther; Jenny and the Cat Club; MF Ave Bemelmans, Ludwig; Madeline's Rescue; E Bem (Caldecott) Blume, Judy; Freckle Juice; MF Blu Bonsall, Crosby; The Case of the Cat's Meow; E Bon Byars, Betsy; Trouble River; MF Bya Cameron, Ann; The Stories Julian Tells; MF Cam Cleary, Beverly; Ramona Quimby, Age 8; MF Cle Cleary, Beverly; Henry Huggins; MF Cle Coerr, Eleanor; The Josefina Story Quilt; E Coe Coerr, Eleanor; Sadako and the Thousand Paper Cranes; 362.1 Coe Cole, Joanna; The Magic School Bus Lost in the Solar System; 523 Col Dahl, Roald; Charlie and the Chocolate Factory; MF Dah Dalgliesh, Alice; The Courage of Sarah Noble; MF Dal Danziger, Paula; Amber Brown Is Not A Crayon; MF Dan dePaola, Tomie; Strega Nona; E deP Dillon, Barbara; The Teddy Bear Tree; MF Dil Fleischman, Sid; The Whipping Boy; MF Fle (Newberry) Flournoy, Valerie; The Patchwork Quilt; E Flo Gardiner, John; Stone Fox; MF Gar Haywood, Carolyn; Betsy and the Boys; MF Hay Howe, Deborah; Bunnica; MF How Lindgren, Astrid; Pippi Longstocking; MF Lin Lobel, Arnold; Ming Lo Moves the Mountain; E Lob MacDonald, Betty; Mrs. Piggle Wiggle; MF Mac MacLachlan, Patricia; Sarah Plain and Tall; MF Mac (Newberry)</p>	<p>McCloskey, Robert; Lentil; E McC Miles, Miska; Annie and the Old One; MF Mil Milne, A.A.; Winnie the Pooh; MF Mil Monjo, F. N.; The Drinking Gourd; E Mon O'Brien, Robert; Mrs. Frisby and the Rats of Nimh; MF O'Br (Newberry) Osborne, Mary Pope; Magic Tree House (Series); MF Osb Parish, Peggy; Amelia Bedelia; E Par Polacco, Patricia; Mrs. Katz and Tush; E Pol Prelutsky, Jack; The New Kid on the Block; Poems; M 811.54 Pre Rockwell, Thomas; How to Eat Fried Worms; MF Roc San Souci, Robert; The Talking Eggs; M 398.2 San Scieszka, Jon; The True Story of the Three Little Pigs; E Sci Selden, George; The Cricket in Times Square; MF Sel Shreve, Susan; The Flunking of Joshua T. Bates; MF She Silverstein, Shel; The Missing Piece; MF Sil Sobol, Donald; Encyclopedia Brown, Boy Detective; MF Sob (series) Step toe, John; Mufaro's Beautiful Daughters; E Ste Van Allsburg, Chris; The Polar Express; E Van (Caldecott) Viorst, Judith; Alexander and the Terrible, Horrible, No Good, Very Bad Day; E Vio Ward, Lynd; The Biggest Bear; E War (Caldecott) Warner, Gertrude; The Boxcar Children; MF War (series) Waters, Kate; Sarah Morton's Day; M 974.4 Wat White, E.B.; Stuart Little; MF Whi White, E.B.; Charlotte's Web; MF Whi Wilder, Laura Ingalls; Little House In the Big Woods; MF Wil Williams, Vera; A Chair for My Mother; E Wil Zemach, Harve; Duffy and the Devil; M 398.2 Zem (Caldecott)</p>
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