Rising to 4th Grade: Required Summer Tasks

Reading and Writing:
Students will read BOTH: *Clara and Davie* by Patricia Polacco and *Locomotion* by Jacqueline Woodson (NOTE: *Locomotion* is written in poetry format. It is not rhyming poetry and not a book written in narrative form but we feel confident they will love it).
- After reading *Clara and Davie*, make a video of yourself (on a phone, tablet, etc.) answering the following questions.
  1. Using the text in the video to support your answers, tell something you learned about Clara (point to the picture or text that helped you) and tell something you learned about Davie (point to the picture or text that helped you).
  2. What do you think Patricia Polacco is trying to tell readers?
  3. Using the book in the video, describe your favorite part of the book and tell why you liked it so much.

Students will need to complete the following writing task for the book *Locomotion*.
- After reading *Locomotion*, complete the following writing task: Lonnie was asked to make journal entries so you are going to do the same thing. In a journal of your choice, make a weekly journal entry (please write the date at the top of the page). When you are writing, just keep your pencil moving. Do not cross things out or edit, just write. There is no length it has to be, just please be proud of your entry each time.
  1. Week 1: Describe a family member or friend in detail.
  2. Week 2: Describe a favorite toy you had when you were very young.
  3. Week 3: Describe in detail what your house smells like.
  4. Week 4: Tell about how you felt when someone told you to be quiet.
  5. Week 5: Tell all about one day of the week you really like or really dislike and why.
  6. Week 6: Describe your favorite place.
  7. Week 7: What does summer taste like?
  8. Week 8: Open a book and choose a line at random. Use that as your first line of a free write.
  9. Week 9: Choose an object from home but don’t write the name of the object. Instead, write what it is like from the perspective of that object.
  10. Week 10: LAST entry :) Tell what you are looking most forward to as a 4th grader.
Math

Key skills students should have entering 4 grade:

- Addition and Subtraction fact fluency within 30 (this always needs to be kept current)
- Hundreds, Tens and Ones place value knowledge
- Reading and writing time to the nearest 5 minutes
- Comparing numbers to 999 using <, =, >
- Rounding numbers to the nearest 10 and 100
- Use addition and subtraction with regrouping for three-digit numbers (within 1,000)
- Measure length using appropriate tools, comparing lengths using number sense
- Solve word problems involving money
- Fluently multiply and divide within 100 (multiplication and division facts 1-10 in mixed settings)
- Extend knowledge of multiplication facts to multiples of 10 (3 x 50 = 30 x 5 = 15 x 10 = 150)
- Understand fractions as numbers representing number of equal parts of a whole
- Compare fractions (<, =, >) using models and on a number line
- Understand fractions that represent whole numbers (all of the parts over the number of parts - 4/4 or 8/8)
- Compare two fractions with either a like numerator or denominator using reasoning about the size of the parts
- Recognize equivalent fractions using a same-size model or number line
- Estimate problems involving addition and subtraction using rounding.
- Geometric measurement: use multiplication and addition to solve area and perimeter problems of polygons

Workbook suggestions:

- Summer Bridge Activities 3-4

Math application suggestions for portable electronics/computers:

- Reflex Math for fact fluency (available for a fee)
- Khan Academy (free)
- IXL (20 questions per day free, also available for a fee)
- Sumdog for all math skills (available for a fee)
- Abcya.com (free)
- Math Planet Pro for all math skills (free)
- Bedtime Math for word problems (free)
- Splash Math (available for a fee)
- Math Playground (available for free)

We would like students to keep their math facts sharp - both in addition and subtraction - especially fluency within 30, and in multiplication and division within 100 (1-10 mixed multiplication facts).
We would like you to think about using Math in your everyday life. We would also like you to maintain the habit of writing down your math work. Please see below for a list of possible ways to practice math during the summer months. We would like you to be creative in how you would like to demonstrate evidence of the activity selections below - a poster, scrapbook, slide / powerpoint presentation, including pictures of at least two activities and bringing in either completed pages or scratch paper / written work completed, as well as writing a sentence or two about how the activity went (How did the game go?) We will present these work artifacts at the beginning of the year.

**Museum Math**
Calculate the current age of an artist, or how old they lived to be. Calculate how long ago an event was, the art was made or how old the building is. Compare these ages to your current age, your parents and grandparents. Were your parents born yet at this time period? Were your grandparents born yet in this time period? How does knowing this information impact your like or dislike of the event / artwork / artifact?

**Seed Estimation**
“Deadhead” a flower (marigolds produce a ton of seeds!) see if you can find the seeds. Choose a flower outside (not a cut florist variety, and not one currently in bloom) that has wilted and is dried up - this is called “deadheading” - taking off the dead flowers from a plant. Count the number of seeds created. (Marigolds make lots of long spear-shaped ones and gerber daisies make fluffy dandelion-seed like ones, for instance). Once you have counted the number of seeds, round them to the nearest 10. Count the number of other flowers or buds on the plant to see how many more flowers will produce seeds as well. Multiply the rounded number of seeds by the total number of flowers to calculate about how many seeds that plant will produce. How many plants could be produced? Do you think that’s how many plants will be made? Why or why not?

**Other options:** Buy seed packets and count the number of seeds in one pack, round them to the nearest 10 and multiply by the number of seed packets bought. How many plants could be produced? Do you think that’s how many plants will be made? Why or why not?

**Further activities:** Plant the seeds, observe and record the results - how many were produced? What was the area of the bed it was planted in, what was the perimeter? How far apart were the seeds? What worked well and what could have been done differently? How tall did the plants grow? Did they produce more seeds? If so, estimate how many.

**Skip counting Hop-scotch**
Use sidewalk chalk to create a hopscotch board. Number the squares through 10. Toss a small stone. Wherever it lands, skip count to x10 by that number. Repeat until you have done all math facts through x10. For example, stone lands on 4, skip count as you jump through the hop-scotch board 4,8,12,16,20,24,28,32,36,40.
**Vingt-et-un dice game**
The object of this game is to get as close to 21 without going over. The closest to 21 without going over wins! Roll two dice. Add up the pips. Roll one die again, re-add. Continue to add and re-roll until you get close to 21 or you go over! Then it is the other person’s turn. Being able to add numbers fluently and quickly has never been so fun!

*Variation:* Play with cards instead. Face cards (J,Q,K) are worth 10 points. Aces (A) are worth either 1 or 11, depending on if 11 will put you over or help you, and all other cards are worth their number. The probability of going over 21 changes with cards. If you are at 17 in the card game or 17 in the dice game, how is it different if you roll again or take a card?

**Multiplication dice game**
Using 2 or 4 dice, Roll and add 2 dice together. If using only 2 dice, roll again and add again, otherwise, if you are using 4 dice, add the other 2 dice for the second factor. Multiply those factors together. Record your score. Re-roll and repeat. Now add the new product to your score. Keep rolling and recording. The first person to go over 300 total wins! This keeps multiplication sharp through x12 and adds complexity with mental addition and addition with regrouping.

*Variation:* Play with cards instead. Face cards (J,Q,K) are worth 10 points. Aces (A) are 1. Flip two cards over. Add them. Flip another card, multiply the first factor by the second card (as the second factor). This will now include multiples of 10. For instance, Flip over two cards - J,K. Add them up = 20. Flip another card over - 4. Multiply 20 x 4 = 2 x 4 = 8 and 2 x 40 = 80.

**Science:** As rising 4th grade science students, the ability to read, understand, and apply nonfiction text is an important key to success. If you would like your child to practice these skills, Mrs. Basham highly recommends a workbook called *Reading Fundamentals (Grade 4)* by FlashKids. It is sold online ([https://www.amazon.com/Reading-Fundamentals-Nonfiction-Activities-Comprehension/dp/1411478843](https://www.amazon.com/Reading-Fundamentals-Nonfiction-Activities-Comprehension/dp/1411478843)) as well as in stores such as Barnes & Noble. This is not a required summer activity, but is encouraged if you would like to help build your child’s nonfiction reading skills while learning some fascinating information about science and history!

**Optional task (Giraffe Club)**
One of the organizations our school supports is the Helping Hands Food Pantry. With the help of a parent, research an organization in the area that could use support either with volunteering, donations, or a specific cause. Answer the questions below in a paragraph and be ready to share it with next year’s fourth grade class.

1. What is the name of the organization and what do they do?
2. How do you think we could help them?
3. Find the name and number of a contact person and include that in your paragraph.
4. If you think they could use donations, what activity or activities would you want to do to raise money?