ST. GREGORY THE GREAT CATHOLIC SCHOOL SUMMER 2022 READING AND MATH ENRICHMENT



Students Entering Sixth Grade August 2022

Dear St. Gregory Parents,

Happy summer! While you are enjoying your summer, please encourage your child to read as much as possible. Reading is one of the most important skills which can impact your child's academic success and confidence!

The following pages have information regarding the math and reading activities our sixth grade teachers would like your child to complete during the summer. Please send the completed activities with your child on the second day of school.

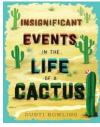
Sixth Grade Summer Reading

- Incoming Sixth grade students will read *Insignificant Events in the Life of a Cactus* by Dusti Bowling.
- Please type the story reflection and turn it into your ELA teacher during the first week of school.
- Please plan accordingly when reading because you will be required to take an AR quiz on this novel during the first week of school, which will count towards your first quarter goal. The teacher will go over the novel during the first week of school and quizzes will not be deleted.

Sixth Grade Math Readiness

- Included in this packet is a math readiness packet. Please print the packet and complete all pages. All work and steps are to be shown for each problem or the packet will be considered incomplete.
- The packet will be due to your child's teacher on the second day of school.
- The packet has been paced for you so that students have a break during the summer yet also review skills that they learned during fifth grade.
 - Week of July 5 -Multiplying and Dividing Whole numbers
 - Week of July 12 -Rounding, Word & Expanded Form and Comparing & Ordering
 - Week of July 19 -Adding, Subtracting, Multiplying and Dividing Decimals
 - Week of July 26 -Adding, Subtracting, Multiplying and Dividing Fractions
 - Week of August 2 -Metric and Customary Systems and Volume

Do not use calculators!



Incoming 6th Grade Summer Reading

Incoming 6th graders are required to read one (1) novel and are encouraged to read more.

Mandatory: Insignificant Events in the Life of a Cactus by Dusti Bowling (ISBN-13: 978-1454923459)

Students will take an AR test on Insignificant Events in the Life of a Cactus upon returning to school. Students do not have to take an AR test on the other two novels read. Please note that NO AR quizzes will be deleted. Please be prepared and plan accordingly.

Insignificant Events in the Life of a Cactus Novel Reflection - You may write (in cursive and blue ink) or type your responses on a google document.

Novel: Insignificant Events in the Life of a Cactus

Author: Dusti Bowling

1. What is the genre of this story? Pick one from each grouping. (Fiction or Non-fiction?) and (Fantasy, Mystery, Historical, Realistic, or Science?) Explain why the story falls into these two categories.

2. List three major characters according to their importance to the plot and briefly describe each character's role in the plot of the story.

3. **Describe the setting** (**place** <u>and</u> **time**-past/present/future, historical period in time or a season). If there are multiple settings, describe only one or two main places the story takes place in.

4. **Conflict-**Describe the main character's problem. Is it an internal conflict or external conflict? Explain.

5. **Resolution**-Describe how the character's problem was solved.

6. Tell how Aven or Connor has changed over the course of the novel. Do this by describing which character trait he or she had at the start of the novel and <u>explain how that trait</u> <u>changed</u> over the course of the story. Your character may also develop new traits when overcoming the conflict, so mention those too.

I read Insignificant Events in the Life of a Cactus. I know I will be taking the AR quiz on Insignificant Events in the Life of a Cactus upon returning to school.

Student Signature

Parent Signature

Multiplying Whole Numbers

I.	Write the problem vertically	İ
2.	Multiply the ones digit of the bottom number by each of the digits in the top number, right to left	ex: 3,481 x 142
3.	Bring down a zero and then multiply the tens digit of the bottom number by each digit in the top number, right to left	x 3,481 <u>142</u>
	Bring down two zeros and repeat with the hundreds digit of the bottom number	6962 + 139240 348100
: 5. 	Add up all of the products	494,302
· <u> </u>		·

Dividing Whole Numbers

- 1. Write out the long division problem with the first number (dividend) underneath the division symbol and the second number (divisor) to the left of the division symbol
- 2. Divide the divisor into the smallest part of the dividend it can go into and write the number of times it can go in on top of the division symbol
- 3. Multiply the number on top by the divisor and write the product under the number you divided into in step 2
- 4. Subtract your product from the number above it
- 5. Bring down the next digit of the dividend
- 6. Repeat steps 2-5 until there is nothing left to bring down.
- 7. If your last subtraction answer is not zero, write the remainder on top

ex: 6,425 ÷ 21

05 R 20 21 6425 2 \cap 25 05

Find each product. Show your work.

1. 238 x 5	2. 832 x 156	3. 4,899 x 67	4. 756 x 300
5. 19 x 863	6. 188 x 732	7. 3,249 x 173	8. 609 x 840

Find each quotient. Show your work.

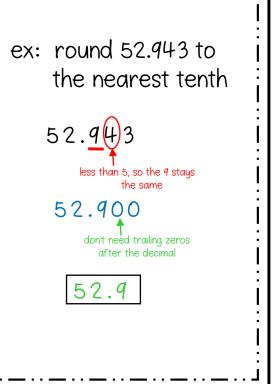
9. 876 ÷ 2	10. 9,473 ÷ 5	11. 396 ÷ 24	12. 8,911 ÷ 45
13. 700 ÷ 12	14. 1,065 ÷ 15	15. 2,737 ÷ 305	16. 4,516 ÷ 22

Solve each problem, showing all work.

17. Mrs. Kleim bought 5 boxes of 15 pencils to give to	18. Sarah and her 3 friends split a bag of candy
her students. If she has 26 students in her class,	evenly. They each ate 13 pieces of candy and there
how many pencils can she give each student? How	were 2 pieces leftover. How many pieces of candy
many pencils will she have left over?	were originally in the bag?

Rounding with Whole Numbers \mathcal{E} Decimals

Γ				· — ·		_		· — · ·	<u> </u>	
	ten-thousands	thousands	hundreds	tens	ones		tenths	hundredths	thousandths	
	 Keep all digits to the left of the place you are rounding the same 					ire				
2. If the digit to the right of the rounding digit is less than 5, keep the rounding digit the same. If it's 5 or greater, increase the rounding digit by 1.					If					
3. Change all places to the right of the digit you are rounding to 0. (Trailing zeros after the decimal are unnecessary)										
l <u>∶_</u> .						· · <u>–</u>			· · <u> </u>	· <u> </u>



Word Form & Expanded Form

- 1. <u>Word Form</u>: write the whole number in word form, translate the decimal to "and", ε write the decimal as if it were a whole number, followed by the name of the place of the last digit
- 2. <u>Expanded Form</u>: write the value of each nonzero digit separately, with addition signs between them

ex: 209.315

two hundred nine and three hundred fifteen thousandths

200 + 9 + 0.3 + 0.01 + 0.005

Comparing & Ordering Decimals

Compare the whole number portions of the ١. ex: 13.702 13.74 If they are different write > for numbers. greater than or < for less than. 13 = 1313.7 = 13.72. If the whole numbers are the same, compare each digit to the right of the decimal point, one at 13.70 < 13.74a time until you find digits that are different. (If necessary, add zeros at the end of a decimal.) |13.702 < 13.74 So,

Round the number 21,498.2536 to the nearest indicated place.

19. tenth	20. hundred	21. thousandth	22. one
23. thousand	24. hundredth	25. ten	26. ten-thousand

Complete the chart below.

Standard Form	Expanded Form	Word Form
3.962	27.	28.
29.	100 + 2 + 0.09	30.
31.	32.	Five thousand six hundred eighty-five and twelve hundredths
8,770.006	33.	34.
35.	900 + 10 + 4 + 0.3 + 0.02 + 0.008	36.
37.	38.	Two thousand nine and thirty-five thousandths

Compare each pair of numbers by writing <, >, or = in the provided circle.

39. 0.046 0.13	40. 9.52 90.13	41. 24.13 24.130	42. 15.96 15.906
43. 0.964 0 1	44. 6.83 6.825	45. 7.256 7.24	46. 32.9 3.290

Order the numbers from least to greatest.

47. 6.86, 6.8, 7, 6.9, 6.827	48. 12.03, 1.2, 12.3, 1.203, 12.301

Adding & Subtracting Decimals

2. Add zeros, if necessary	
[2.7)	8 <mark>0</mark>
3. Add or subtract the numbers as if they were	28
4. Bring the decimal point straight down	20

Multiplying Decimals

- 1. Write the problem vertically with the numbers lined up to the right (decimals do NOT need to be lined up)
 - 2. Ignore the decimal points and multiply the numbers as if they were whole numbers
 - 3. Count the total number of decimal places in the two factors and put a decimal point in the product so that it has that same number of decimal places

ex: 3.24 x 0.8
$x \xrightarrow{1 3 \\ 3 2 4 2 2 \text{decimal places}}_{1 \text{decimal places}}$
2592 2592 2592
i

Dividing Decimals

: : 	۱.	Write the dividend under the division symbol and the divisor in front of the division symbol	ex:	32.3 ÷ 0.5
	2.	Move the decimal in the divisor after the number and then move the decimal in the dividend the same number of places and bring it up		<u>64.6</u> 0.5)32.30 30↓
 	3.	Ignore the decimal point and divide as if whole numbers		23
: : 	4.	If there is a remainder, add a zero to the end of the dividend, bring it down, and then continue dividing until there is no remainder		$\frac{30}{30}$

Find each sum or difference. Show your work.

49. 8.74 + 10.36	50. 37.4 – 8.55	51. 12.9 + 105.67	52. 450.89 - 213.33
53. 24.1 + 3.74	54. 14.76 – 9.8	55. 622.85 + 53.49	56. 67 – 14.06

Find each product or quotient. Show your work.

57. 4.5 x 6	58. 144.8 ÷ 4	59. 2.7 x 0.8	60. 6.2 ÷ 0.04
61. 8.9 x 2.5	62. 15.8 ÷ 0.5	63. 14.8 x 0.12	64. 16.2 ÷ 1.2

Solve each problem, showing all work.

65. Ryan spent \$3.25 on lunch every day, Monday through Friday. If he had \$20 at the start of the week, how much money did he have left after Friday?	66. Three friends went out to lunch. The bill came to \$47.31. If they split the bill evenly, how much money does each friend owe?

Adding $\boldsymbol{\varepsilon}$ Subtracting Fractions

ι. Ι	Rename the fractions to equivalent fractions with common denominators	ex: $4\frac{4}{q} + \frac{2}{3}$
2. :	Add or subtract the numerators and keep the denominator the same	$+ \begin{array}{c} 4\frac{4}{q} \times \frac{1}{x} & \frac{4}{q} \\ + \begin{array}{c} 2 \times \frac{3}{3} & \frac{6}{q} \end{array}$
 : 3. 	If mixed numbers, add or subtract the whole numbers	+ $\frac{2}{3} \times \frac{3}{3} \frac{6}{q}$
: 4. : 	If possible, simplify the answer & change improper fractions to mixed numbers	$4 \frac{10}{q} = 5 \frac{1}{q}$

Multiplying Fractions

l I.	Turn a whole number into a fraction by giving it a denominator of 1	ex: $6 \times \frac{2}{3}$
2.	Cross-simplify the fractions if possible	$\frac{2}{1} = \frac{4}{1}$
3.	Multiply the 2 numerators and the 2 denominators	$\frac{1}{2} \times \frac{3}{2} = \frac{1}{2}$
4.	If possible, simplify the answer ε change improper fractions to mixed numbers	= 4

Dividing Fractions

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2.	Keep the I st fraction the same, change the division symbol to multiplication, and flip the 2 nd fraction to its reciprocal	$\frac{12}{1} \div \frac{1}{2}$
3.	Multiply the 2 fractions	12 2 24
4.	If possible, simplify the answer $arepsilon$ change improper fractions to mixed numbers	$\frac{12}{1} \times \frac{2}{1} = \frac{24}{1} = 24$
<u> </u>		···_··_··_··_··_

Find each sum or difference. Show your work.

67. $\frac{7}{8} + \frac{5}{6}$	68. $\frac{q}{10} - \frac{1}{2}$	69. $\frac{3}{11} + \frac{2}{3}$	70. $\frac{11}{12} - \frac{13}{18}$
71. $4\frac{5}{q} + 7\frac{1}{3}$	72. $12\frac{9}{14} - 9\frac{3}{7}$	73. $3\frac{3}{5} + 2\frac{3}{4}$	74. $2\frac{2}{15} - 1\frac{2}{3}$

Find each product or quotient. Show your work.

75. $\frac{1}{6} \times \frac{3}{4}$	76. $6 \div \frac{1}{3}$	77. $15 \times \frac{2}{3}$	78. $\frac{1}{2} \div 3$
		F 2	1
79. $\frac{1}{6} \times 10$	80. $\frac{1}{4} \div 2$	81. $\frac{5}{9} \times \frac{3}{20}$	82. $4 \div \frac{1}{5}$

Solve each problem, showing all work.

83. Jacqui ran 1 $1/2$ miles on Monday, Wednesday, and Friday and $3/4$ mile on Tuesday and Thursday. How far did she run in all?	84. Tyrell gave 3 packs of baseball cards to his friends. He gave each friend 1/3 of a pack. How many friends got baseball cards?

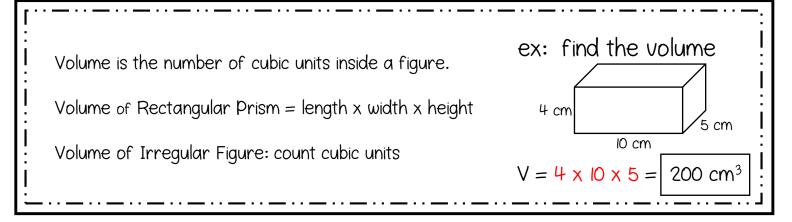
The Metric System

Kilo-	Hecto-	Deca-					
		Decu	Base Units				ex: 23 m = cm
			meters/ liters/ grams	Deci-	Centi-	Milli-	going from base unit step to centi- step, so need to move the decimal 2 places right
	ine the					•	23.00
you are	takes to converti	ng to and		he decim			= 2,300 cm

The Customary System

Length	Weight	Capacity	ex: 18 c = pt
1 ft = 12 in 1 yd = 3 ft 1 mi = 5,280 ft	1 lb = 16 oz 1 T = 2,000 lb	c = 8 f oz pt = 2 c qt = 2 pt gal = 4 qt	cups are smaller units of measure than pints, so need to divide
		nit to a smaller in maller unit to a lar	

Volume



Convert each Metric measurement. Show your work.

85. I.9 km = m	86. 23 g = mg	87. 350 ml = kl
88. 0.07 kg = cg	89. 6 cm = m	90. 35 ml = l

Convert each Customary measurement. Show your work.

91. 48 in = ft	92. 6 pt = c	93. 3 T = lb
94. I.5 mi = ft	95. 32 pt = gal	96. 32 oz =lb

Find the volume of each figure. Show your work.

