



***Cambridge Christian School  
2017 -2018 Summer  
Reading and Math Assignment  
For students entering 6<sup>th</sup> Grade***

Summer reading is an excellent way to prepare for a successful experience in 6<sup>th</sup> grade.

- This summer, you will choose ONE novel from the list below. After reading the novel, you will complete the reading reflection worksheet attached. This assignment is due on the first day of class.

<b>Author</b>	<b>Title</b>
Alcott, Louisa May	<i>Little Women</i>
Armstrong, William H.	<i>Souder</i>
Avi	<i>Crispin: Cross of Lead</i>
Babbitt, Natalie	<i>Tuck Everlasting</i>
Banks, Lynne Reid	<i>The Indian in the Cupboard</i>
Burnett, Frances Hodgson	<i>A Little Princess</i>
Burnett, Frances Hodgson	<i>The Secret Garden</i>
Cushman, Karen	<i>Midwife's Apprentice</i>
Draper, Sharon	<i>Out of my Mind</i>
E'ngle Madeline	<i>A Wrinkle in Time</i>
E'ngle, Madeline	<i>The Arm of the Starfish</i>
Estes, Eleanor	<i>The Hundred Dresses</i>
Estes, Eleanor	<i>Ginger Pye</i>
Gantos, Jack	<i>Joey Pigza Swallowed the Key</i>
Graham, Kenneth	<i>Wind in the Willows</i>
Herriot, James	<i>All Creatures Great and Small</i>
Hickam, Homer	<i>October Sky</i>
Jackson, Percy	<i>The Lightning Thief</i>
Jacques, Brian	<i>Redwall (or any from series)</i>
Kipling, Rudyard	<i>Jungle Book</i>
Lewis, C.S.	<i>The Lion, the Witch, and the Wardrobe</i>
Montgomery. L.M.	<i>Anne of Green Gables</i>
North, Sterling	<i>Rascal</i>
O' Dell, Scott	<i>Island of the Blue Dolphins</i>
Paterson, Katherine	<i>Bridge to Terabithia</i>
Rawls, Wilson	<i>Where the Red Fern Grows</i>
Spyri, Joanna	<i>Heidi</i>

Name \_\_\_\_\_

**This worksheet must be turned in the first week of school. Work on this as you read the book, so you do not forget the information. Read the entire worksheet before reading the book, so you know what to look for as you read the novel. Please remember that you are forming important first impressions and should answer these questions with excellence in both thought and presentation.**

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- This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- List four characters in the novel and describe some character traits that stand out. You may use a circle thinking map to display the traits.

1. Character name : \_\_\_\_\_

Description of character traits :

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2. Character name : \_\_\_\_\_

Description of character traits :

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3. Character name : \_\_\_\_\_

Description of character traits :

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4. Character name : \_\_\_\_\_

Description of character traits :

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This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface.

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[illegible]

- Please express what you liked best about this book. Be as specific as you can.

[illegible]

NAME \_\_\_\_\_

## ***6<sup>th</sup> Grade Math 2017 Summer Review***

**\*\*\*YOU MUST KNOW YOUR MULTIPLICATION TABLES!!!\*\*\***

These 5<sup>th</sup> grade skills are a pre-requisite in order to be successful in 6<sup>th</sup> grade math. Please ***show your work*** for each problem on notebook paper, then write your answer to the right of the problems on this sheet. This review will be due the first day of class.

**Find the sum or difference.**

1.  $0.6 + 5.8 =$  \_\_\_\_\_
2.  $2.1 + 3.4 =$  \_\_\_\_\_
3.  $3.4 - 0.972 =$  \_\_\_\_\_
4.  $3.1 - 2.076 =$  \_\_\_\_\_
5.  $8.13 - 2.716 =$  \_\_\_\_\_
6.  $5.91 + 2.38 =$  \_\_\_\_\_
7.  $3.086 + 6.152 =$  \_\_\_\_\_
8.  $4 - 1.9 =$  \_\_\_\_\_

**Find the product.**

9.  $240 \times 0.02 =$  \_\_\_\_\_
10.  $43.79 \times 42 =$  \_\_\_\_\_
11.  $0.72 \times 0.43 =$  \_\_\_\_\_
12.  $4.7 \times 2.8 =$  \_\_\_\_\_

**Find the quotient.**

13.  $0.4 \div 2 =$  \_\_\_\_\_
14.  $3.9 \div 5 =$  \_\_\_\_\_
15.  $2.6 \div 2 =$  \_\_\_\_\_
16.  $1.08 \div 4 =$  \_\_\_\_\_

**Write the next three terms in each pattern.**

17. 3, 9, 15, 21, \_\_\_\_\_
18. 135, 126, 117, 108, \_\_\_\_\_
19. 2, 6, 18, 54, \_\_\_\_\_
20. 13, 14, 16, 19, \_\_\_\_\_

**Write each mixed number as an improper fraction.**

21.  $1\frac{7}{8} =$  \_\_\_\_\_
22.  $2\frac{3}{4} =$  \_\_\_\_\_
23.  $7\frac{1}{3} =$  \_\_\_\_\_
24.  $8\frac{2}{3} =$  \_\_\_\_\_

**Write each improper fraction as a mixed number in simplest form.**

25.  $\frac{17}{5} =$  \_\_\_\_\_
26.  $\frac{18}{4} =$  \_\_\_\_\_
27.  $\frac{36}{15} =$  \_\_\_\_\_
28.  $\frac{28}{21} =$  \_\_\_\_\_

**Write each decimal as a fraction or mixed number in simplest form.**

29.  $0.6 =$  \_\_\_\_\_ 30.  $1.25 =$  \_\_\_\_\_ 31.  $0.74 =$  \_\_\_\_\_ 32.  $0.29 =$  \_\_\_\_\_

**Write each fraction or mixed number as a decimal.**

33.  $1\frac{7}{25} =$  \_\_\_\_\_ 34.  $\frac{3}{50} =$  \_\_\_\_\_ 35.  $\frac{1}{125} =$  \_\_\_\_\_ 36.  $2\frac{7}{8} =$  \_\_\_\_\_

**Write each fraction or mixed number as a percent.**

37.  $\frac{1}{2} =$  \_\_\_\_\_ 38.  $3\frac{7}{10} =$  \_\_\_\_\_ 39.  $\frac{7}{8} =$  \_\_\_\_\_ 40.  $2\frac{3}{4} =$  \_\_\_\_\_

**Find the sum or difference and write in simplest form.**

41.  $\frac{1}{2} + \frac{3}{4}$  42.  $\frac{11}{16} - \frac{5}{16}$  43.  $\frac{9}{10} + \frac{1}{2}$  44.  $\frac{7}{8} - \frac{1}{4}$

45.  $\frac{7}{8} - \frac{3}{10}$  46.  $\frac{5}{6} + \frac{3}{4}$  47.  $\frac{3}{8} - \frac{1}{3}$  48.  $\frac{1}{8} + \frac{1}{5}$

**Find the sum or difference and write in simplest form.**

49.  $14\frac{3}{10} - 5\frac{1}{5}$  50.  $6\frac{3}{8} + 2\frac{1}{2}$  51.  $2\frac{1}{2} + 4\frac{1}{10}$  52.  $21\frac{5}{8} - 18\frac{1}{3}$

53.  $7\frac{1}{6} + 9\frac{7}{12}$  54.  $8\frac{1}{10} + 5\frac{2}{5}$  55.  $9\frac{1}{4} - 2\frac{1}{8}$  56.  $19\frac{3}{4} - 19\frac{2}{5}$

**Find the product and write in simplest form.**

57.  $\frac{3}{4} \cdot \frac{3}{5}$  58.  $\frac{1}{3} \times \frac{9}{10}$  59.  $\frac{1}{12} \cdot \frac{3}{4}$  60.  $\frac{3}{4} \times \frac{8}{9}$

**Find the quotient and write in simplest form.**

61.  $\frac{4}{5} \div \frac{4}{7}$  62.  $\frac{4}{7} \div \frac{1}{2}$  63.  $\frac{3}{5} \div \frac{3}{4}$  64.  $\frac{5}{6} \div \frac{1}{3}$

**Complete each statement.**

65. 45 c = \_\_\_\_\_ qt 66. 12 ft = \_\_\_\_\_ yd  
67. 15 pt = \_\_\_\_\_ qt 68. 32 qt = \_\_\_\_\_ gal  
69.  $4\frac{1}{3}$  ft = \_\_\_\_\_ in. 70.  $2\frac{3}{4}$  yd = \_\_\_\_\_ ft

**Round each decimal to the underlined place.**

71. 3.064 = \_\_\_\_\_ 72. 920.4489 = \_\_\_\_\_  
73. 0.975 = \_\_\_\_\_ 74. 16.32 = \_\_\_\_\_



**Solve each equation.**

75.  $x + 4 = 9$     $x =$  \_\_\_\_\_

76.  $16 = y - 5$     $y =$  \_\_\_\_\_

77.  $2x = 10$     $x =$  \_\_\_\_\_

78.  $28 = 4y$     $y =$  \_\_\_\_\_

**Match the angle to the measurement.**

\_\_\_\_\_ 79. Measures  $180^\circ$

A. Acute angle

\_\_\_\_\_ 80. Measures between  $0^\circ$  and  $89^\circ$

B. Obtuse angle

\_\_\_\_\_ 81. Measures between  $91^\circ$  and  $179^\circ$

C. Right angle

\_\_\_\_\_ 82. Measures  $90^\circ$

D. Straight angle

**Identify each polygon according to the number of sides.**

\_\_\_\_\_ 83. 3 sides

A. Decagon

\_\_\_\_\_ 84. 4 sides

B. Heptagon

\_\_\_\_\_ 85. 5 sides

C. Hexagon

\_\_\_\_\_ 86. 6 sides

D. Octagon

\_\_\_\_\_ 87. 7 sides

E. Pentagon

\_\_\_\_\_ 88. 8 sides

F. Quadrilateral

\_\_\_\_\_ 89. 10 sides

G. Triangle

**Find the area and perimeter of each rectangle or square.**

**Perimeter** -  $P = 2\ell + 2w$

**Area** -  $A = \ell \times w$

90.  $\ell = 12$  cm,  $w = 2$  cm

91.  $\ell = 2.5$  m,  $w = 2.5$  m

92.  $\ell = 4.5$  ft,  $w = 0.75$  ft

93.  $\ell = 6$  in.,  $w = 6$  in.

**Find the probability of each event. Simplify when necessary.**

94. You pick a vowel from the letters in EVENT. \_\_\_\_\_

95. You pick a month that begins with the letter J. \_\_\_\_\_


96. A number cube is tossed. What is the probability of rolling a 1, 3, or 5. \_\_\_\_\_

97. A spinner is labeled 1 - 6. What is the probability of spinning a 1 or 5. \_\_\_\_\_

**How many lines of symmetry does this shape have?**

98.  \_\_\_\_\_

99.  \_\_\_\_\_

100.  \_\_\_\_\_

## **6<sup>th</sup> Grade 2017 SUMMER CHALLENGE MATH PACKET (Optional)**

It's SUMMER!!! Hooray! Let the relaxation begin! I pray you will have a restful and rejuvenating 10 weeks off! I love summer, too, but what I don't love is the dreaded SUMMER BRAIN DRAIN for students. Did you know that students lose an average of 2.6 months of math skills over the summer and it takes an average of 6 weeks to recover those skills at the beginning of a new school year? We have SO much to do to prepare you for MIDDLE SCHOOL and I want to hit the ground running on August 10!

This CHALLENGE MATH PACKET is designed to help you maintain the skills you worked so hard to master in 5<sup>th</sup> grade while allowing you to have some fun in the process! Students who complete five or more hours of math-related activities over the summer will be rewarded. Please see the ideas below for suggestions. Don't stop at these, though! The sky is the limit with math practice. Come up with your own ideas to keep those math skills fresh!

***(NOTE: THE 6<sup>TH</sup> GRADE SUMMER REVIEW DOES NOT COUNT TOWARD THIS CHALLENGE).***

**How does it work? It's as easy as:**

1. Check out the ideas below to find some fun websites and activities. Don't forget...you can create your own activities too! As long as it is math related, it counts!
2. Document what you complete on the chart found at the end of this packet and have your parent initial each entry then sign at the end of the summer.
3. Hand in the signed and completed chart during the first week of school.

## **ON YOUR MARK...GET SET...GO!**

### **Math Facts Activities:**

Fact fluency is one of the first casualties of the long summer vacation. ***YOU MUST KNOW YOUR MULTIPLICATION TABLES AND BE ABLE TO RECITE THEM EASILY!!***

Here are some ideas to keep you multiplying like a pro:

**Multiplication War:** Use playing cards. Throw down two cards. The person who finds the product of the two cards first keeps the pair.

**Keep those math facts fluent with fun on-line practice!**

<http://www.multiplication.com/games/all-games>

Multiplication.com has some great games to play by alone or against other kids online!

<https://www.superteacherworksheets.com/math-drills-minute.html>

You can print out Mad Minutes to see how much you know at Super Teacher Worksheets.

<https://www.education.com>

You can find worksheets covering fractions, decimals, and more!

### Other Online Games:

<http://www.arcademics.com/>

Arcademic Skill Builders is a great resource to refresh all math operation areas. Play arcade games to review basic operations, fractions, decimals, and working with money!

<http://www.math-play.com/Factors-and-Multiples-Jeopardy/Factors-and-Multiples-Jeopardy.html>

Factors and Multiples Jeopardy: Remember the difference between factors and multiples with this fun on-line game!

[http://www.mathplayground.com/math\\_manipulatives.html](http://www.mathplayground.com/math_manipulatives.html)

Go to the Math Playground to practice skills like measuring angles, working with fractions, and creating congruent or similar shapes using transformations

<http://teacher.scholastic.com/maven/>

For fun logic games, try out Math Maven's Mysteries!

### Other favorite sites include:

<http://www.hoodamath.com/>

<http://www.jmathpage.com/>

<http://www.puzzles.com/products/rushhour/rhfrommarkriedel/Jam.html?1>

<http://www.setgame.com/set/puzzle>

### ***Board Games***

There are fun games you can play to pass a rainy day... and practice your math, too! You probably already have many of them at home. Here are just a few that are great for math practice!

#### **Basic Operations:**

Monopoly

Life

Payday

S'Math

Tripoly

#### **Patterns and Geometry:**

Sequence

Blokus

Geoshapes

Quirkle

#### **Coordinate Graphing:**

Battleship

#### **Probability:**

Deal or No Deal?

#### **Logical Reasoning:**

Clue

Stratego

SuDoKu

#### **Strategy Games:**

Mancala

Othello

Connect 4

Chess and Checkers

### ***Math with Cards and Dice***

Almost everyone has a deck of cards in their house, and there are so many ways a deck of cards can be used to practice math skills! Check out the activities to reinforce math concepts found on this website: <http://www.k5chalkbox.com/math-card-games.html>

Add some dice – and have more fun! Here's a great website with 4 great games you have probably already played in school: <http://teacher.scholastic.com/lessonrepro/lessonplans/grmagam.htm>

### **Other real-life math activities:**

#### **Take a Trip...maybe just down the street!**

Before you take off on that family trip, help your parents and get in on the planning! Here are a few examples of where math can be used when taking that family trip:

Use an atlas and figure out how many miles you'll be driving – the scale of miles is a great example of proportion and measurement used in real life!

What's your car's fuel efficiency? Add to find out the total cost to fill up the tank throughout your trip; divide to calculate the miles driven per gallon of gas; multiply to determine the cost of a fill-up based on your expected travel distance... is it time to purchase a hybrid vehicle?

How fast did you get there? Use the car's trip odometer to find out how many miles you've driven, and determine your average speed.

**Where will you be?** Using a map, calculate where you will be if you travel 20, 50, 100, or 1,000 miles from home.

**How many ways?** As you're exploring your neighborhood during the summer, use a map to determine how many routes can you take to the school, the grocery store, the mall, or your friend's house? Which way is the shortest? The longest? Create a table to organize your data.

#### **Gardens of Eating... and Math!**

Besides providing a great source of delicious summer vegetables and fresh flowers, gardens grow great opportunities to show practical applications for math.

How big is that garden? How much fencing is needed to keep out the deer (or worse...armadillos)? How much fertilizer do you need to keep the garden (or yard) growing?

How much mulch do you need to order if you want to put it down 3" thick in your flower beds?

What is the weight of that prize-winning tomato or pumpkin? How many peppers are on the pepper plant? If you need to keep your bean plants 3 inches apart, how many plants will grow on a 12 foot row? How many seeds should you plant?

Go to the supermarket or farmer's market and find out the cost of fresh vegetables you can grow at home. How much money will you save if you grow it yourself?

#### **Take me out to the ballgame!**

Take in a summer baseball game – either at the ballpark or on TV. Baseball's a natural place to see math in action – from a pitcher's ERA to a hitter's on-base percentage. Record the events of the game using a scorecard (print one here: <http://baseballscorecard.com/downloads/Scorecard-c.pdf>). To find out all about how to keep score, go to Patrick McGovern's fantastic website: The Baseball Scorecard (<http://www.baseballscorecard.com/>). Then, calculate some statistics about your favorite players (<http://www.baseballscorecard.com/statistics.htm>)!

### **Take a trip to the grocery store!**

Estimate the total bill based on prices of what you are purchasing.

How much does that bunch of bananas weigh? How much will it cost?

What is the unit price of your favorite box of cereal? What is the unit of measurement, and how much is the total cost of that box?

### **In the kitchen – cook up some math!**

Measure all of the ingredients (especially the liquids in the glass measuring cups).

Challenge yourself to double the recipe or cut the recipe in half – fractions are everywhere!

### **Let's eat!**

Prepare a meal or dish for the family. Before you go to the supermarket, find a recipe, write what you need and how much. At the supermarket, choose the best-priced option.

### **Back-To-School**

You've gotten that list of needed school supplies from the CCS website... how much will they cost? Use the advertisements in the Sunday newspapers to find the best deals... and calculate how much you'll spend to get set for the new school year. The costs add up... do you really need that new backpack, or will what you had last year still work for you?

Have you grown three inches? Need new uniforms? Check out [www.rissebrothers.com](http://www.rissebrothers.com) (you will need to register on this site so make sure you have a parent's permission) and estimate how much your new clothes will cost. How close were you to the total?

### **Get ACTIVE**

**Record-breakers:** Use a stopwatch to time yourself running, roller blading, swimming, or biking. Then try to beat your time. Be sure to keep the distance you're moving the same for each trial (you may need a partner for this). Graph the results..

## **Read Some Books...About Math!!**

And since you need to keep those reading skills fresh too, how about combining reading with math? Check out these great titles!

<b><u>Title</u></b>	<b><u>Author</u></b>
The I Hate Mathematics! Book	Burns, Marilyn
The Phantom Tollbooth	Juster, Norton
Janice Van Cleave's Math for Every Kid: Easy Activities That Make Learning Math Fun	Van Cleave, Janice Pratt
G Is for Googol: A Math Alphabet Book	Schwartz, David M.
Janice Van Cleave's Geometry for Every Kid: Easy Activities That Make Learning Geometry Fun	Van Cleave, Janice Pratt
Math Curse	Scieszka, Jon
Brown Paper School Book: Math for Smarty Pants	Burns, Marilyn
This Book Is about Time	Burns, Marilyn
Math for Kids and Other People, Too!	Pappas, Theoni

There are many other ways to use math in real life over the summer. These are just a few suggestions. **Feel free to make up your own ideas!** Just remember to keep track of what you do. There's a chart on the next page to help you. Have a great summer... and don't forget – math is everywhere!

# SIXTH GRADE SUMMER MATH CHALLENGE LOG

NAME: \_\_\_\_\_

Date	Type of Activity	Specific Activity Description	Amount of time in minutes	Parent initial
7/23	Board Game	Played Monopoly and I was the banker.	45 min	JMM

Total time in minutes: \_\_\_\_\_

Total time in hours (minimum 5 hours for reward): \_\_\_\_\_

***My child has completed the number of hours listed above doing math activities.***

Parent Signature: \_\_\_\_\_