## $6^{\text {th }}$ Grade Math Optional Summer Assignment

For the summer assignment for incoming 6th graders, the current 6th grade math teachers came up with a list of priority skills students can review to best prepare themselves for 6th grade math. The list of the different skills corresponds to lesson topics found in the "Get Ready for $6{ }^{\text {th }}$ Grade" course on Khanacademy.org. Creating an account is completely optional. Additionally, a summer calendar (July \& August) is provided with a problem listed each day that students can complete.

To begin your summer work, you can either choose a priority skill from the list below that you would like to practice on Khan Academy or complete each activity on the summer calendar or do both. On Khan Academy, you will move through the program at your own pace. As you practice the skills, Khan Academy will determine mastery of each skill. The more questions you get right on a skill, the faster you master it and move on to the next skills. If you need more practice on a skill, Khan Academy will provide more practice for you so you can master it. There are also corresponding videos and mini lessons that you can watch to help you with any of the skills you are working on.

There are a lot of topics found besides the suggested topics of focus listed below. The more you practice, the better prepared you will be for 6th grade math next year! Practice as much as you can so that you are confident with your skills when you start school next year! ©)

List of $6^{\text {th }}$ Grade Priority Skills to Review via Khan Academy

| Multi- Digit Multiplication |
| :---: |
| Multi- Digit Division |
| Factors and Multiples |
| Multiply Fractions and Mixed Numbers |
| Adding/Subtracting Decimals |

Adding and Subtracting Fractions (on Khan Academy): https://tinyurl.com/i3749ead

Math Fact Practice: https://www.multiplication.com/
or
https://www.factmonster.com/math/flashcards

## Additional Online Math Resources

Below is a list of websites to keep your mind fresh mathematically over the summer. Try to visit them daily or weekly so that you are ready to go in September! Have fun!

Kuta Software: www.kutasoftware.com/
Softwareformathteachersthatcreatesexactlytheworksheetsyouneedinamatterofminutes. Try for free. Available for PreAlgebra, Algebra 1, Geometry, and Algebra 2.

AAAMath \& Purple Math: www.aaamath.com/ \& www.purple math.com/
These two sites feature comprehensive sets of interactive mathematics lessons. Practice is available on most topics, which allows for thorough mastery of the concepts.

Cool Math 4 Kids: www.coolmath.com/
This fully interactive site allows the user to sharpen basic math skills, play games and explore new math concepts. And it's not justfunandgames! Thereare lessons, printable materials, and a math dictionary that extend into high school material.

Math is Fun: www.mathsisfun.com/
Lessons, animations and explanations on just about any middle school and high school math topic you could need!
Big Ideas Math: www.bigideasmath.com/
Look familiar? This is the companion site for our textbook! Simply choose your book and open it up. Videoclips and interactive practice are also included.

## FunBrain: www.funbrain.com/

FunBrainisthe\#1siteforonlineeducationalgamesforkids of all ages. (math, grammar, science, spelling, and history)
MathPlayground: www.mathplayground.com/
Online Math Games that Give your Brain a Workout.

## Engage in Creative Thinking

Visit the following websites for creative thinking and problem solving problems!
Absurd Math: http://www.tower23.com/abmathcdrom/index.html Absurd Math is an interactive mathematical problem solving game series

Brain Rashers: http://www.brainbashers.com/BrainBashers is a collection ofbrainteasers, puzzles, riddles and optical illusions

Math Challenge: http://mathschallenge.net/ A website dedicated to the puzzling world of mathematics.

## Reflect and Reinforce Skills and Knowledge

Complete your summer calendar to help reinforce skills and mathematical knowledge from grade five.

Entering 6th Grade Math Calendar -July

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Activity 1 <br> Celebrate our nation's independence! | Activity 2 <br> What is a fraction between $\frac{1}{4}$ and $\frac{1}{20}$ ? | Activity 3 <br> Make the largest and smallest numbers you can by using the digits: $1,2,4,7$ and 8 . <br> Find their sum and difference? | Activity 4 <br> Order these fractions from least to greatest. $\frac{7}{8}, \frac{3}{5}, \frac{4}{6}, \frac{1}{2}$ | Activity 5 Simplify: $(2 \times 4)+300 \div 5$ |
| Activity 6 <br> The perimeter of a square is 52 cm . What is the length of each side? | Activity 7 <br> Jen is 12. Amy is 13. In 25 years, what will be the product of their ages? | Activity 8 <br> I am a number less than 50. When divided by 5, my remainder is 4. Who am I? Is there more than one answer? | Activity 9 <br> Write 347,392 in expanded form. | $\quad$Activity 10 <br> List all the factors of both: <br> 18 <br> 54 |
| Activity 11 <br> Write the improper fraction for: $2 \frac{4}{5}$ | Activity 12 <br> If you spend $\$ 100.00$ a day, how many days will it take to spend a million dollars? <br> How many years? | Activity 13 <br> Express the fraction $\frac{45}{100}$ as decimal | Activity 14 <br> What is the value of the 7 in the number 472,085? | Activity 15 <br> What is a composite number? <br> List three examples. |
| Activity 16 <br> Six friends have 4 sandwiches to share. What fraction of a sandwich would each person get? | Activity 17 <br> Evaluate: $\begin{aligned} & 5.7+6.09= \\ & 9.03-1.5= \end{aligned}$ $5.5-3.01=$ | Activity 18 <br> Round to the place value in bold. $\begin{aligned} & \mathbf{6 , 7 0 8} \\ & 8.96 \\ & 803,985 \\ & 0.744 \end{aligned}$ | Activity 19 <br> Multiply without a calculator: $\frac{4}{6} \times 2$ | Activity 20 <br> Find the area: <br> 12 cm <br> 7 cm $\square$ |
| Activity 21 <br> Order the following from least to greatest: $0.03,1.01,0.90,0.905$ | Activity 22 <br> If 1,000 pencils cost $\$ 20$, how much would ten pencils cost? | Activity 23 <br> Solve without a calculator: $\begin{array}{r} 324 \\ \times \quad 45 \end{array}$ |  |  |

Entering 6th Grade Math Calendar -August

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Activity 1 <br> Subtract: $1543-248$ | Activity 2 <br> Find two fractions between: $\frac{8}{10} \text { and } \frac{5}{4}$ | Activity 3 <br> In the pattern, what number belongs between the 7 and the 28 ? $1 \frac{3}{4}, 3 \frac{1}{2}, 7, \ldots 28$ | Activity 4 <br> Write an expression to represent the total number of people in the bus: <br> There are n students on the bus for the field trip. There are also four chaperones. | Activity 5 <br> Simplify: $\frac{6}{8}, \frac{15}{25}, \frac{8}{24}$ |
| Activity 6 <br> What is the largest multiple of 4 that is less than 30 ? | Activity 7 <br> You have a $\$ 10$ gift card to spend on iTunes. You buy an app for $\$ 4.99$ and a new pop single for $\$ 2.99$. How much should be left on your gift card? | Activity 8 <br> How many more even number days are there in July than in February? | Activity 9 <br> Tyler and Madison buy a pizza that is cut into 8 equal slices. If bill eats $1 / 8$ and Carol eats $1 / 4$ of the pizza, how many eights of the pizza are left? | Activity 10 <br> Find the area of a square with a perimeter measuring 20 inches. |
| Activity 11 $3477+b=3500$ <br> What is the value of $b$ ? | Activity 12 <br> Write the decimals as fractions. Express them in their simplest form. <br> $0.55=$ <br> $3.5=$ <br> $2.42=$ | Activity 13 <br> Draw a quadrilateral that has only one set of parallel sides. | Activity 14 <br> What are the whole number divisors of: $1,230$ | Activity 15 <br> If 4 mint chocolatescost $\$ 1.00$, how many mint chocolates can you get for $\$ 5.00$ ? |
| Activity 16 <br> Add: <br> 123.4 and 34.25 | Activity 17 <br> Solve: $\begin{array}{r} 460 \\ \times 50 \\ \hline \end{array}$ | Activity 18 <br> Devon bought a roll of ribbon to make bows for his giftboxes. There were 1322 inches of ribbon on the roll. How many feet of ribbon was that? | Activity 19 <br> Divide: $280 \div 7=$ | Activity 20 <br> Round to the place value in bold. <br> 52,788 81.07 $2,912,865$ |

