



Summer Math Learning Packet

Students entering Grade 7

Purpose

It is important for all students to review math concepts and processes during the summer. Intentional practice of math skills will help students reach **mastery** of required material and increase their ability to use facts and operations easily and accurately (**fluency**). There will also be skill areas or knowledge the students need to strengthen (**reinforce**) or even build upon further through enrichment opportunities. Time spent working on mastery, reinforcement, and **enrichment** will greatly benefit all students.

What parents/guardians can do to support the student

- ✓ Make a practice plan and help your child set goals.
- ✓ Recognize your child's strengths .
- ✓ Help your child to identify the areas of mathematics he/she would like to focus on over the summer.
- ✓ Check in with your child periodically.
- ✓ Create a system with your child to monitor and track progress.

Student Accountability

I spent at least 10 minutes a day, 4 to 5 times a week, practicing math. I completed at least 250 - 300 minutes of math practice over the course of the summer. I recorded my minutes on the tracking sheet. I returned the recording sheet to my 7th grade math teacher. I also showed my teacher my journal where I kept track of my mathematical thinking.

Student Signature

Date

Websites to Explore:

The Math Forum-The Math Forum includes a wonderful Student Center which allows students to choose resources and grade level material they find challenging or interesting. A help area called Ask Dr. Math, an Internet Math Hunt, and Math Tips & Tricks, which includes "BeatCalc", are just a few of the wonderful resources.

<http://mathforum.org/index.html>

Cool Math For Kids- This website provides a variety of games that explore probability and "race the clock" which allows you to practice basic computation skills. There are also several IQ games and brain thinkers that foster your ability to think logically.

<http://www.coolmath4kids.com/>

The Quiz- This website provides math activities listed by concept and skills for all grade levels.

<http://www.thatquiz.org/>

Math Playground- An action-packed site for middle school students to practice math skills, play a logic game and have some fun.

<http://mathplayground.com/>

Math Illuminations, National Council of Mathematics-Choose a grade range to access activities and games.

<http://illuminations.nctm.org/activitysearch.aspx>

Figure this- This site is designed to challenge middle school students with real world challenges.

<http://www.figurethis.org/index.html>

Kids.Gov- This website is the official kids' portal for the U.S. government. It is divided into educational subject like Arts, Math, and History.

<http://www.kids.gov/>

Great Math Books to Read:

A Gebra Named Al by Windy Isdell

Math Curse by Jon Scieszka

Chasing Vermeer by BlueBalliett

Sir Cumference & the Dragon of Pi by Cindy Neuschwander

Sir Cumference & the First Roundtable by Cindy Neuschwander

Sir Cumference & the Great Knight of Angleland by Cindy Neuschwander

Sir Cumference & the Sword in the Cone by Cindy Neuschwander

Number Devil: A Mathematical Adventure by Hans Magnus Enzensberger

Counting on Frank by Rod Clement

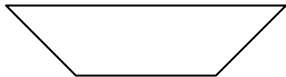
Guinness Book of Records by Time Inc

Mathematicians are People Too by Luetta Reimer & Wilbert Reimer

These resources are intended for you to choose the websites and books that are most interesting to you. Keep in mind that it will be beneficial for you to:

- Solve problems involving addition, subtraction, multiplication and division of fractions.
- Solve problems involving addition, subtraction, multiplication, and division of decimals.
- Convert fractions, decimals, and percents to find equivalent fractions.
- Solve a variety of problems to strengthen your mathematical skills and knowledge.

July 2010 Entering Seventh Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1) Place parentheses in the following equation to make it true. $6 + 6 \div 6 \times 6 - 6 = 0$	2) Dan is now as old as Ken was eight years ago. Ken is now 26. How old is Dan?	3)
4)	5) What is the prime factorization of 32?	6) Roller blades cost \$65. They are on sale for 20% off the original price. What is the selling price of the roller blades?	7) Try a new activity at http://www.coolmath4kids.com/ Challenge yourself. What did you choose to do?	8) How much change would you receive if you hand the clerk \$20 for a purchase of \$13.23?	9) If you pull eight coins from your pocket, and none of them are pennies, what is the largest amount of money that you could have? The least?	10)
11)	12) Find the sum of the first ten prime numbers.	13) Find four fractions between $8/10$ and $5/4$	14) What is the sum of all of the interior angles in a trapezoid? 	15) If the mean, median, and mode are all equal for the following set, what is the value of x? $\{3,4,5,8,x\}$	16) What is a real life example of: $3/4 \div 1/2 =$	17)
18)	19) Look up a math topic and read about the history. Who discovered it? How was it used? Ex. pi, gallons, metric...	20) Try "Beatcalc" at http://mathforum.org/index.html	21) What is the smallest number that is divisible by 1,2,3,4,5,6,7,8,9 and 10? How do you know?	22) I am thinking of a rectangle with side lengths of 5cm and 23cm. What is the area?	23) Find two numbers that have 2,3, and 5 as factors.	24)
25)	26) What would the 45th letter be in the pattern below? How do you know? A B B C C C D E E F F F G H H I I I ...	27) 500 is halfway between 350 and what number?	28) Try Weigh the Wangdoodles at http://mathplayground.com/	29) 12.5% is the answer. What could the question possibly be? Challenge yourself to think of more questions.	30) Read a book from the suggested " Great Math Books to Read " What new vocabulary did you use?	31)

August 2010 Entering Seventh Grade Mathematics Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1)	2) Examine the environment around you (at the beach, museum, your house...) and identify lines of symmetry, tessellations, types of angles... Record the findings	3) Read <u>Guinness Book of Records</u> by Time Inc. What record surprised you the most? Why?	4) The area of a rectangle is 36 sq cm. The lengths of the sides are whole numbers of centimeters. What is the greatest perimeter the rectangle can have, in cm?	5) The Patriots beat the Giants in a football game. The sum of their scores was 44. The difference of their scores was 20. How many points did the Patriots score?	6) Choose a geometry activity at Math Illuminations http://illuminations.nctm.org/activitysearch.aspx	7)
8)	9) Visit the website http://nlvm.usu.edu/en/nav/vlibrary.html . Challenge yourself with fun activities! List them.	10) Play Sudoku from the newspaper How did logic help you to solve the puzzle?	11) The average of six numbers is 4. A seventh is added and the new average is 5. Find the seventh number.	12) Read a book from the suggested " Great Math Books to Read " What new math did you discover?	13) Bryan sells candy bars at 4 for 50¢. How many candy bars must Bryan sell in order to make a profit of \$5.00?	14)
15)	16) How much greater is the product of the first four primes than the product of the first three composites?	17) As of today, what fraction of their games have the Red Sox won?	18) Visit the website Figure this and look for a real life math challenge. http://www.figurethis.org/index.html	19) What is the largest possible area (in square inches) for a rectangle with a perimeter of 120 inches?	20) If Terri swam 3 laps in 2.5 minutes, how long would it take her to swim 20 laps at the same rate?	21)
22)	23) Try a probability lesson at The Quiz http://www.thatquiz.org/	24) What is the smallest three-digit number that is divisible by exactly three different prime numbers?	25) Go to a pizza shop and compare the area of a small pizza to the area of a large pizza. What percent is the increase?	26) A B C D <u> x 4</u> D C B A What is the value of A, B, C, and D if they are each a different digit?	27) Name 3 things you would measure in meters.	28)
29)	30) Marty has 6 more pogs than Jen has. After he gives 10 pogs to Jen, how many more pogs will Jen have than Marty?	31) YOU DID IT! Please bring your journal to your seventh grade teacher on the first day of school!				

