

Welcome to your summer math packet! This packet has been created in order to help you stay current with your math skills. Here is an analogy that will explain why the summer math packet is so important.

Math is like a sport. During the season you practice between games so that your skills are perfect for the games. In math your tests are like games and your homework is like practice. Between tests it is important to practice the concepts by doing the homework so that your skills are perfected for the test.

In the off-season, athletes still practice in order to keep their skills up. When the new season starts, they don't have to re-learn the skills because they have continued to practice them. Your summer break is like the off-season. Between school years you must practice your skills, so you don't forget them while you are out of school. When the new school year begins, you won't have to re-learn all of the skills from the previous year because you never had time to forget. You practiced your skills and kept them on the same level.

The moral of this analogy is to not wait until the week before school starts to work on your summer math packet. By that time, you will have allowed yourself to forget all of the important skills that you learned during the previous school year. Then you will have to rush to re-learn the material in the packet.

Instructions:

- Pay close attention to the examples and vocabulary.
- Complete all of the problems on each worksheet.
- Show your work. Please circle or box your final answer. All work should be included on the worksheet in the space provided.
- The packet will be graded for accuracy as well as effort.
- It's ok to have parents and other adults help you!
- A parent must sign the cover sheet indicating that the child either did the problems themselves or with parental support. This information will be helpful to the teachers in the fall.
- If you feel that you need additional help on one or two topics, try one of the websites from the attached list.
- If you misplace your packet, you can download a copy from the school website.
- Please put the pages in order and staple before turning in the packet. Make sure your name is on the packet.
- The Summer Math Packet is **due on August 23, 2019**. The Summer Math Packet is a 50-point project. See the rubric.
- **You will take an assessment over the contents of this packet during the second week of school.**
- **It is recommended that parents help pace their children through the packets. Please do not allow your child to race through the work.**

Suggested Websites:

AAA Math: <http://aaamath.com/>

A comprehensive set of thousands of interactive lessons Kindergarten through Eighth grade level. Unlimited practice is available on each topic which allows thorough mastery of the concepts. Immediate feedback prevents practicing and learning incorrect methods.

Adapted Mind: <http://www.adaptedmind.com/>

Lessons on a variety of math topics from grades 1-8. Each lesson has problems, explanations and an instructional video.

BrainPop: <https://www.brainpop.com/math/>

Dozens of animated movies on various math topics that will keep your attention focused! Each topic/concept also has a quiz, activity page, an experiment, a timeline, and a short comic-strip. Can watch two movies free daily or buy a yearly subscription for unlimited access.

CoolMath: <http://www.coolmath.com/prealgebra>

All topics relate to pre-algebra. Includes explanations, practice, games and reference tools.

CoolMath4Kids: <https://www.coolmath4kids.com/math-help>

Includes lessons, quizzes, games, manipulatives and brain teasers for addition, subtraction, multiplication, division and fractions.

Hippo Campus: <https://www.hippocampus.org/HippoCampus/>

A free, core academic web site that delivers rich multimedia content - videos, animations, and simulations - on general education subjects to middle-school and high-school students.

Homeschool Math: <http://www.homeschoolmath.net>

A comprehensive math resource site that includes free math worksheets, lessons, online math games lists, eBooks, a curriculum guide, reviews, and more. The resources emphasize understanding of concepts instead of mechanical memorization of rules.

Illustrations: <https://illuminations.nctm.org/>

Project of the National Council of Teachers of Mathematics (NCTM). Provides standards-based lessons, resources and materials for math concepts in grades PreK-12.

Interactivate: <http://www.shodor.org/interactivate/activities/>

Collection of interactive materials for a variety of math topics.

Math Glossary: http://jukebox.esc13.net/interactiveGlossary/HTML_files/interactiveVocabularySearch.html

Provides definitions, key characteristics, examples and non-examples for math terms.

Math Planet: <https://www.mathplanet.com/>

An online resource providing free math lessons for Pre-algebra, Algebra 1, Algebra 2 and Geometry. It also has practice tests for the SAT and ACT.

IXL Math: <https://ca.ixl.com/math/>

Detailed explanations, interactive questions, engaging item types, and real-world scenarios to develop math skills. Grouped by topic and grade level.

Khan Academy: <https://www.khanacademy.org/math>

All math topics for any grade level can be searched. All topics have explanations, videos, and practice for each topic.

Learn Zillion: <https://learnzillion.com/Math>

Math instructional videos. Short (3-10 minute) videos intended for teacher and student use focused on targeted concepts and skills. Organized by topic.

Math Cats: <http://mathcats.com/>

Website promotes open-ended and playful explorations of important math concepts in the context of online games, interactive applets, and activity suggestions.

A Math Dictionary for Kids: <http://amathsdictionaryforkids.com/>

Math dictionary which explains mathematical terms in simple language. Also provides free math charts.

Math Drills: <http://www.math-drills.com>

Offers reinforcement and drills on various topics of middle school math including number sense and pre-algebra.

Math Flix: <http://mathflix.luc.edu/>

Instructional math movies, 4-7 minutes in length, covering a wide range of math concepts. Also features downloadable worksheets that reinforce concepts and provide valuable practice.

Math is Fun: <http://www.mathisfun.com/>

Math explained in easy language, plus puzzles, games, quizzes, worksheets, interactive dictionary and a forum.

Math Goodies: <https://www.mathgoodies.com/>

A math help website featuring free interactive lessons, worksheets, games and puzzles.

Math Playground: <http://www.mathplayground.com/mathvideos.html>

Offers math videos on a variety of middle school math concepts. Also has word problems and logic puzzles.

Math Videos: <http://mathvids.com/level/3-middle-school-math>

Online math video lessons for middle school.

Mr. Barton Maths: <http://mrbartonmaths.com/topics/>

Notes, lessons, videos on middle school and algebra topics.

Online Math Practice: <https://www.ipracticemath.com/>

Free interactive online math practice for grades 1-12. More topics added every month.

Pre-Algebra: <https://www.shmoop.com/pre-algebra/>

Free learning guides (tutorials) for all prealgebra topics with interactive practice problems, step-by-step examples, graphs, and real-world applications. This can be used for an online pre-algebra textbook.

Purple Math: <http://www.purplemath.com/index.htm#>

Math lessons emphasize the practicalities rather than the technicalities, demonstrating dependably helpful techniques, warning of likely "trick" test questions, and pointing out common student mistakes.

Splash Math: <https://www.splashmath.com/>

An online math practice system for grades K-5. Includes all basic topics for those grades. You can practice 20 questions per day for free.

Student Guide: <http://www.studentguide.org/a-complete-list-of-online-math-resources/>

Comprehensive collection of useful resources for students for all math subjects from the basics to calculus.

Virtual Nerd: <http://virtualnerd.com/>

Over 1,500 video lessons covering Middle Grades Math through Algebra 2.

WebMath: <http://www.webmath.com/>

A math-help web site that generates answers to specific math questions and problems, as entered by a user. In addition to the answers, Webmath also shows the student how to arrive at the answer.

World of Math Online: <http://www.math.com/>

Free math lessons and homework help from basic math to algebra and geometry. Also has a glossary of math terms.

Student Name _____

Summer Math Packet - Rising Eighth Grade

	4	3	2	1
Effort	All pages are completed	At least 30 pages are completed	At least 20 pages are completed	At least 10 pages are completed
Accuracy	At least 90% of the completed problems are correct	At least 80% of the completed problems are correct	At least 70% of the completed problems are correct	At least 60% of the completed problems are correct
Calculations	Work is shown for all necessary problems. It is clearly labeled, and easy to follow. Work is completed on the worksheet.	Work is shown for all necessary problems. It may be difficult to follow and/or not clearly labeled.	Work is shown for at least 50% of the problems. It may be difficult to follow and/or not clearly labeled.	Work is shown for at least some problems. It is not clearly labeled and/or difficult to follow.
Presentation	Material is legible. All pages are stapled with worksheets in the correct order and no extra work pages. Rubric is included on the top.	Material is legible. All pages are stapled with worksheets in the correct order. May include extra work pages. Rubric is included on the top.	Material can be read with some difficulty. All pages are stapled with worksheets in the correct order. May include extra work pages. Rubric may or may not be included.	Material is difficult to read. All pages are stapled. Pages may or may not be in the correct order. Rubric may or may not be included.
Timeline	Packet was returned by the deadline.	Packet was turned in 1 day late.	Packet was turned in 2-3 days late.	Packet was turned in less than 1 week late.

	Score	Weight	Adjusted Score
Effort		X 3	
Accuracy		X 3	
Calculations		X 3	
Presentation		X 2	
Timeline		X 1.5	
	Total Score		/50

Please check one:

- _____ Student completed the packet independently.
 _____ Student completed the packet with minimal assistance.
 _____ Student completed the packet with parental support.

Parent's signature: _____

Include this page on the top of your packet when you turn it in.