



# Summer Math

**Attention all students entering Grades 5-8:**

Summer Math is **REQUIRED** for you!  
**It will count as your first homework grade and will be an easy way to start the year off great in math!!**

You will select a *minimum* of **two** activities, although you are welcome to choose more than that. You may also choose to work with a buddy or even a group to get outside and have some fun!!

During the summer months, skills become rusty and you can even lose some of what you learned this year. By participating in Summer Math, you will keep your math knowledge fresh and be better prepared to be successful next year.

The activities have been designed to help you connect the math you learn in school to the real world around you. You can click on the links to explore loads of digital resources to help you, and use digital photos or video to help document what you do. Have fun with it!

## **WHAT DO YOU HAND IN WHEN YOU RETURN IN SEPTEMBER??**

Your product can be a journal/notebook where you have completed your tasks, a Powerpoint where you show what you did and reveal your solutions, a video where you show and tell what you found....get creative!

As long as you complete at LEAST 2 of the activities and show your work and solutions, you will receive credit! Remember that this product will be the first piece of work that your teacher will get from you, make sure it is neat, complete, well done, and has your name on it!!

Be sure to indicate which activities you selected. For example:  
Choice #1: Shopping with Unit Rates / Choice #2: Track Steps and Ratios

*If you have any questions, email Mrs. Mello at [mrsmellomathfacts@gmail.com](mailto:mrsmellomathfacts@gmail.com)*

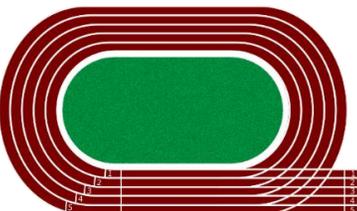
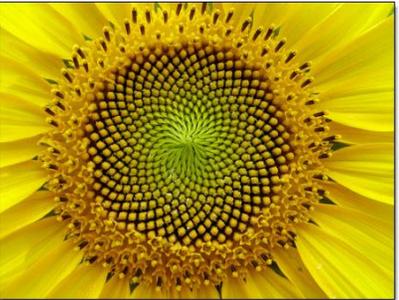
**HAVE A WONDERFUL SUMMER AND STAY SAFE!!!**



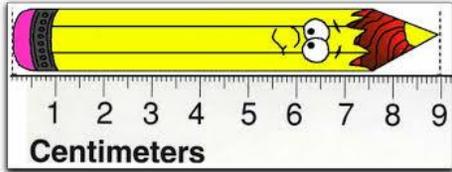
## Where is Math in Your World?

### Entering Grade 5 - 2017 Summer Math Projects – Ahern Middle School

(Complete at least 2 projects - due first week of school)

Project Title	Directions	Entering Grade 5
<p><b>1. <u>Geometric Figures in Our World</u></b></p> 	<p>Find the Geometric figures (see grade list) in the outdoors. Describe and explain the dimensions and purpose of figure. (things at the playground, in the backyard or school)</p>	<p>1. Find an example of a right, acute and obtuse angle and take a picture or make a sketch and label each angle with the correct description.</p> <p><a href="https://www.youtube.com/watch?v=NVuMULQjb3o">https://www.youtube.com/watch?v=NVuMULQjb3o</a>  <a href="https://www.youtube.com/watch?v=g7K4zztMXT0">https://www.youtube.com/watch?v=g7K4zztMXT0</a></p> <p>2. Find the area and perimeter of a space that you use during the summer. For example: your bedroom, living room, or backyard.</p> <p><a href="https://www.flocabulary.com/unit/area-and-perimeter/">https://www.flocabulary.com/unit/area-and-perimeter/</a></p>
<p><b>2. <u>Track Steps and Ratios</u></b></p> 	<p>Measure the distance of the Middle School running track as outlined by grade.</p>	<p>1. What is your estimate for how long it will take you to walk (or run) once around the track?                  2. Time one lap around the track walking or running.                  3. A track is <math>\frac{1}{4}</math> of a mile long. Use your rate of time per lap to calculate how long it will take you to walk (run) 1 mile? 5 miles? 25 miles?</p> <p>Watch this video for a review of rate.  <a href="https://youtu.be/RQ2nYUBVvqI">https://youtu.be/RQ2nYUBVvqI</a></p>
<p><b>3. <u>Numbers in Nature</u></b></p> 	<p>Find natural objects in nature. Classify and explore number relationships as outlined by grade level. (classify and describe patterns that occur naturally)</p>	<p>Watch these videos to learn about patterns in nature.</p> <p><a href="https://youtu.be/wTlw7fNcO-0">https://youtu.be/wTlw7fNcO-0</a>  <a href="https://youtu.be/kkGeOWYOFoA">https://youtu.be/kkGeOWYOFoA</a>  <a href="https://youtu.be/-GVQ2-3Nv2s">https://youtu.be/-GVQ2-3Nv2s</a></p> <p>Find 2 examples of symmetry. Take a picture or make a sketch of the example and show the lines of symmetry. Below is a video to help you with symmetry.</p> <p><a href="https://www.youtube.com/watch?v=YFzktJNmnPU">https://www.youtube.com/watch?v=YFzktJNmnPU</a></p>

4. **Metric and Customary Systems of Measurement**



Measure an outdoor figure and provide measurements in both systems as outlined by grade level.

Find an object outside that you can measure **or** record the distance from your home to a place you visit this summer. Some places to look for objects are outside your home, at a playground, the beach or a park. An outing might be to visit a relative, a trip to the beach or park or a vacation (just somewhere that you traveled away from home).

Create a table to show the dimension that you measured (length, width or distance) in a unit that makes sense for the object or distance. For example: A large object would probably be measured in feet and meters or an outing would probably be measured in miles or kilometers. You should do your measuring in customary and metric measurements.

Convert the unit of measure in the customary system to the additional units so your table reflects:

Feet, Inches, Yards, Miles (for distance only),

Convert the unit of measure in the metric system to the additional units so your table reflects:

Millimeters, Centimeters, Meters, Kilometers (for distance only).

Video for metric system review:

[https://learnzillion.com/lesson\\_plans/7014](https://learnzillion.com/lesson_plans/7014)

Video for customary system review:

[https://learnzillion.com/lesson\\_plans/5003-compare-and-convert-customary-units-of-length](https://learnzillion.com/lesson_plans/5003-compare-and-convert-customary-units-of-length)

**Online Rulers:**

<https://www.printablerulers.net/click2.php>



## 7. Library Numbers



Explore Decimals using the Dewey Decimal Numbering System that is used in the library

Visit the library or use the online catalog for the library to find a non-fiction book on a topic of your choice. Some suggested topics and books are:

- **Math Theme Books**

Career Ideas for Kids Who Like Math  
Real Life Math Series  
Fun With Roman Numerals  
See Symmetry

- **Space Theme Books**

Books about Planets

- **Sports Theme Books**

The History of \_\_\_\_\_ (Basketball related)  
NFL Today – The Story of \_\_\_\_\_ (Baseball related)  
Pro Sports Hall of Fame

- **Craft Theme Books**

- **Cooking Theme Books**

SAILS online catalog

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

**Please note you can use any Non-Fiction book for the activity as long as it has a decimal number for its' catalog number.**

Please answer the following questions related the book's Dewey Decimal Number:

1. What is the name of the book you chose and the Dewey Decimal Number associated with this book?
2. What would be the equivalent mixed number for the book's decimal catalog number? (Remember a mixed number is a whole number plus a fraction)
3. Compare the number of your book to the following decimal numbers using (<, =, >):  
352.1, 650.01, 452.60

**If you having trouble locating a book, please ask the librarian for help.**

**Converting decimals to fractions:**

[https://learnzillion.com/lesson\\_plans/6185-convert-decimals-to-fractions-to-the-hundredths-place-using-visual-aids](https://learnzillion.com/lesson_plans/6185-convert-decimals-to-fractions-to-the-hundredths-place-using-visual-aids)

**Comparing decimals:**

[https://learnzillion.com/lesson\\_plans/6024](https://learnzillion.com/lesson_plans/6024)

**Online Hundredths grid paper:**

<https://www.eduplace.com/math/hmcam/tools/blms/g5/5hmmca-mc48-mc.pdf>