

Summer Math Experience

In this summer's math experience, you will be looking for applications or topics of math that are around you in your everyday life. You will be creating a book of photo essays of your experiences to document what you have found. Please be sure to follow the directions below. The idea is that you are always thinking about how math is used in everyday life, so be collecting photographs of your experiences over the entire summer.

What is a photo essay?

A photo essay is a collection of images that are placed in a specific order to tell a story or show a progression of events. Photo essays are similar to a traditional essay, but photographs are used instead of detailed written explanations.

For your experience, you will need to think of ways you use math or see math in your everyday life, photograph those ideas and lay them out in such a way that describes how you (or others) use math every day. You should have some short written explanations for clarification.

All photographs in your essay should be taken by you. Please do not use images from the internet. To ensure authenticity, please put something in your photographs that indicates that you took the photograph. I suggest a notecard with your name on it or a unique drawing.

Requirements by Grade Level

The topics you report in your photo essay should reflect the different topics of math you have learned about. The more experience you have had in math; the more variety your essay should have. For example, if you're going into the 8th grade, the topics you might include in your essay might include fractions, decimals, estimation, measurement and money. If you are going into the 11th grade, the topics you might include fractions, decimals, estimation, measurement, money, rates, rate of change, graphs, parallel lines, polygons, angles, area, scale, volume, etc.

Essay Pages by Grade

The number of pages in your essay book will be determined by your grade and math experience.

If you are,

1. a rising 7th grader, your essay book should have 3 pages (3 different topics)
2. a rising 8th grader, your essay book should have 4 pages (4 different topics)
3. a rising 9th grader, your essay book should have 5 pages (5 different topics)
4. a rising 10th grader, your essay book should have 6 pages (6 different topics)
5. a rising 11th grader, your essay book should have 7 pages (7 different topics)
6. a rising 12th grader, your essay book should have 8 pages (8 different topics)

See the example page on the next page. Look for arrows and highlighted requirements.

Over the summer I found many examples of math in the real world. I had no idea how many examples of math I could find until I started to look deeper. For example, my bag of Skittles. As I was eating my family size bag of Skittles, I realized I could organize the bag by color, then find what fractional amount of each color is in the bag and what percent of the bag was represented by each color.



Here are my initials to validate my photographs.



Photos taken with my phone and emailed to myself for the essay page.



I separated my bag of Skittles by color. Then I counted each color and used the information to create fractions then decimals.

A little description.

The mathematics. It's beautiful.

Amounts: Red: 60, Yellow: 34, Purple: 42, Green: 48, Orange: 54. Total: 238

Fractions and Percents:

Red: $\frac{60}{238}$, about 25%. To find the percent I divide 60 by 238 then multiply my answer by 100.

Purple $\frac{42}{238}$, about 18%, Yellow: $\frac{34}{238}$, about 14%, Green $\frac{48}{238}$, about 21%, Orange $\frac{54}{238}$, about 23%