



**Class Title:** Blue Math Magicians STEM

**Teacher Name:** Trish Poston

**Class Day:** Friday

**Class Size:** 12

**Class Cost:** \$40

**Class Fee:** \$96

**Ages or color group served:** Blue

**What level is this class:** Level 3

**Prerequisites:** Students should be able to write and read numbers including writing in complete sentences.

Being able to follow instructions is crucial to participate and complete the activities planned for this class.

**Graduation Requirements:** NA

**Homework Requirements:** There will be homework most weeks for this class.

**Class Description:**

In this class, students will explore how math is an important part of everyday life. Each class, there will be a lesson that either teaches a math trick or concept along with a STEM activity or project. Each lesson will show students interesting and meaningful ways to use numbers.

There will be light homework for this class.

**Week 1:**

Numbers are Everywhere:

Students will learn a math trick to become "Mind Readers"

**Week 2:**

Möbius Mystery:

Like the artist, MC Escher, students will learn about the mysteriously mathematical mindbender, the möbius strip.

**Week 3:**

Magic Multiples:

Students will learn useful mental arithmetic tricks to remember Multiplication tables.

**Week 4:**

The Golden Ratio:

Like artists and architects often use, students will learn about ratios and use golden rectangles to create perfect spirals.

### **Week 5:**

#### Secret Codes:

Students will learn about the importance of coding still used today and create their own cipher wheel.

### **Week 6:**

#### Symmetrical Sides:

Students will learn about symmetry and identify objects accordingly. They'll be drawing the missing half of a picture using a ruler and grid paper to help guide them.

### **Week 7:**

#### Rotational Shapes:

Students will learn about rotational symmetry, like propellers, pinwheels and snowflakes and create their own.

### **Week 8:**

#### Fitting Together:

Students will learn the importance of tessellation. This is an important skill to understand for tasks such as laying tile to ensure there are no gaps to cover the space.

### **Week 9:**

#### Prime Numbers:

To help students recognize prime numbers, students will make a game of Prime Snap! to be able to play and recognize them. This will be a very helpful skill for many math concepts now and in their future!

### **Week 10:**

### Graph Graphics:

Students will not only learn how graphs help us understand and compare data at a glance. They will be introduced to x-axis and y-axis on a graph and plotting points to create a picture.

### **Week 11:**

#### Pieces of the Pie:

Students will pair up and collect data. Then they'll work individually to create a personality pie chart using a protractor to measure the degree of the angles.

### **Week 12:**

TBD, but it will be fun for all to wrap up the semester!