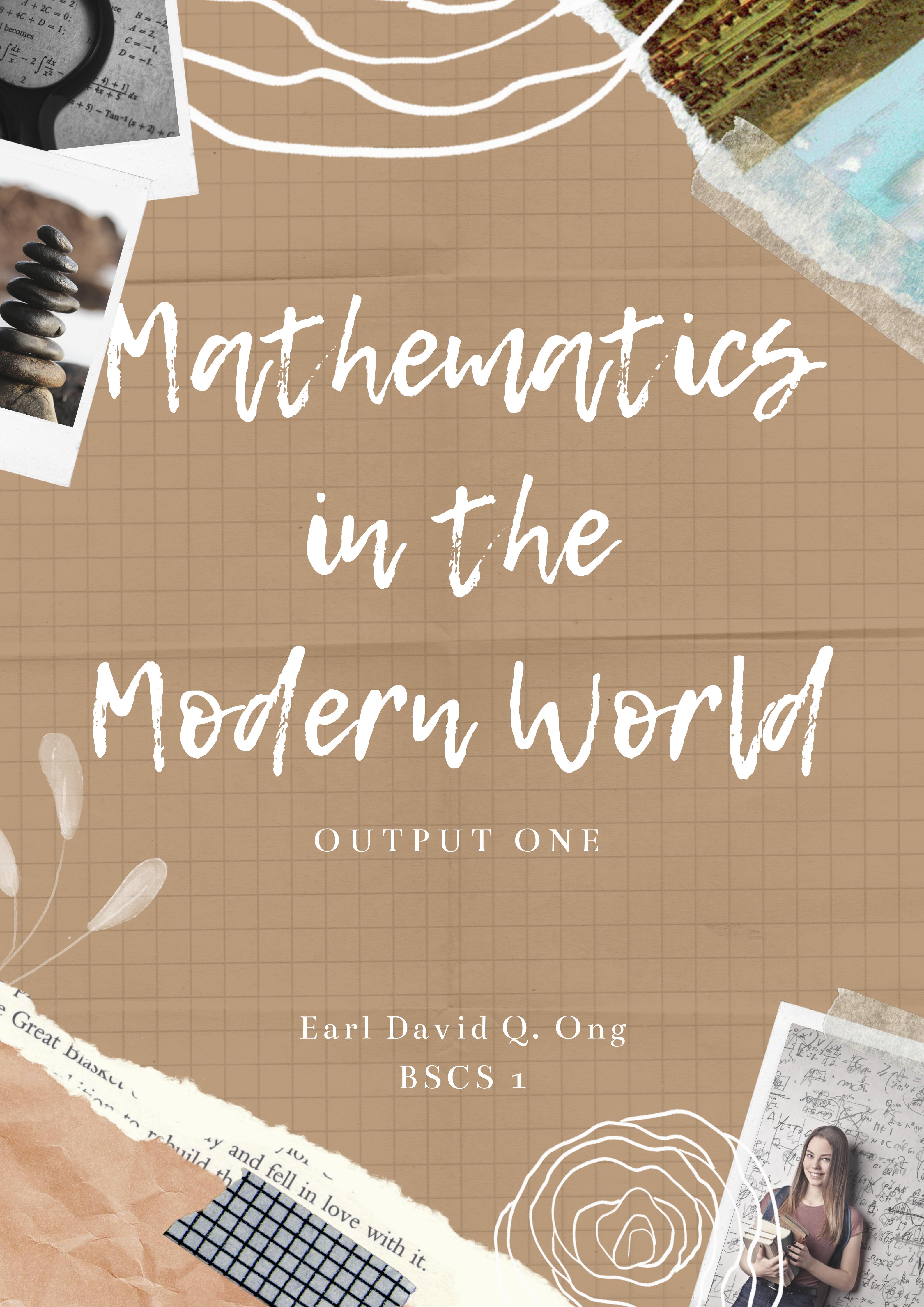


Mathematics in the Modern World

OUTPUT ONE

Earl David Q. Ong
BSCS 1



My Mandala

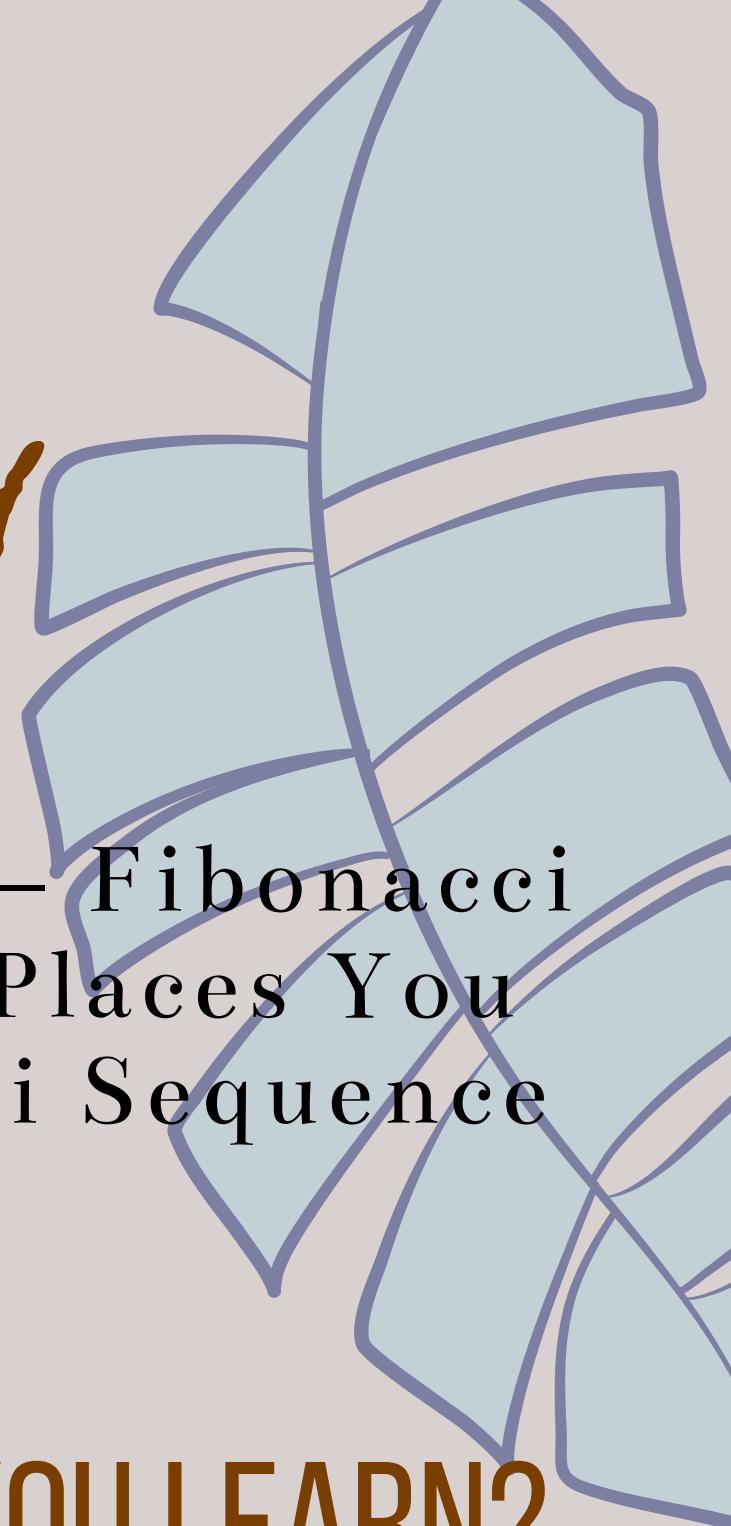


This mandala represents harmony despite complementary. The colors I used are complementary to one another, purple to yellow, red to green, etc. We can depict from this, that even we are at opposite sides of life, we can achieve harmony.



Reflection

on "Decoding the Secret Patterns of Nature – Fibonacci Sequence and the Golden Ratio & Pi." and "Places You Won't Believe The Golden Ratio & Fibonacci Sequence Appears" from YouTube.com

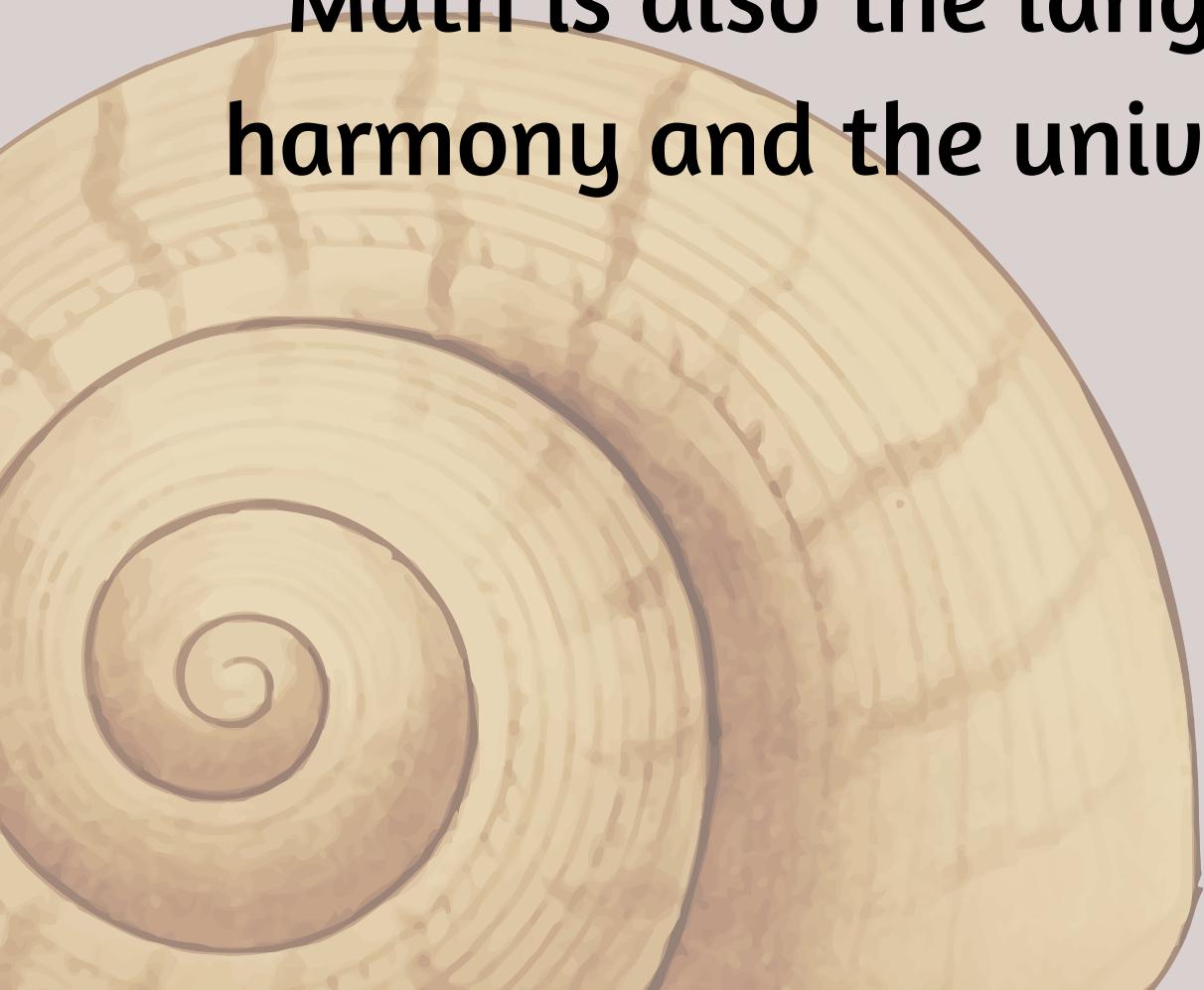


1. WHAT NEW IDEAS ABOUT MATHEMATICS DID YOU LEARN?

Mathematics is the science of numbers and operations that we see and use daily. There are more to what we see and what the human senses detect on what Math is. Patterns, the thing we call 'time', the structures of well-known buildings, are result of Math, if not, Math itself. A good idea of these said examples of math is the Fibonacci sequence and the golden ratio. It depicts a pattern or 'sequence' living in harmony with the universe. An example is the shape of our milky way - shaped like a nautilus shell.

What I learned from this documentary that Math is more than equations and numbers, Math is more of what is behind a pattern we can see everyday from buildings and structures.

Math is also the language we need to learn to understand harmony and the universe. The Golden Ratio exists across all subjects.



Reflection

on "Decoding the Secret Patterns of Nature – Fibonacci Sequence and the Golden Ratio & Pi." and "Places You Won't Believe The Golden Ratio & Fibonacci Sequence Appears" from YouTube.com

2.WHAT IS IT ABOUT MATHEMATICS THAT MIGHT HAVE CHANGED YOUR THOUGHTS ABOUT IT?

I look at Mathematics as a subject that we all need to pass in order to graduate, now I see that Math is some kind of language in order to understand harmony in the universe. Math can also lead us into new discoveries. Time, as we all know, is based on the pattern or the cycle of day and night, but time has more depth explanation in it if we interpret it using Math and equations. By looking into things with Math, we can derive a perspective in life that we may use. Math is a language of understanding harmony in life.

Reflection

on "Decoding the Secret Patterns of Nature – Fibonacci Sequence and the Golden Ratio & Pi." and "Places You Won't Believe The Golden Ratio & Fibonacci Sequence Appears" from YouTube.com

3. WHAT IS MOST USEFUL ABOUT MATHEMATICS FOR HUMANKIND?

Math is one of the reasons we have homes, electricity, technology, the exploration of different planets, and even the structures of human anatomy. Considering math as an important method for exploring energy and how it works, people are now able to predict something in the future entirely due to mathematics.

Mathematics brings order to our lives and avoids disorder. Power of reasoning, ingenuity, abstract or spatial thought, logical thinking, problem-solving abilities, and even strong communication skills are all attributes that mathematics fosters.

Reflection

on Fractals

1. WHAT NEW IDEAS ABOUT MATHEMATICS DID YOU LEARN?

The term infinity implies that it is limitless and without end, that it continues indefinitely. In my previous thoughts about math, I always assumed that mathematical equations had limits and that there was always an answer at the end. However, seeing the two videos about the Mandelbrot collection fascinated me so much that I was proud to even know about it. Mandelbrot grew up with the ability to mentally translate formulas into pictures, and as a result, he was able to answer several mathematical equations as a child.

One day at work, a programmer encountered some mistakes, and he noticed data that seemed to be similar, reminding him of a mystery that many mathematicians find frightening. The monster dilemma is a very old one that many people find strange. A German mathematician gave an example of a monster problem: imagine a line divided into three and removing the middle line, then there will be two mini lines and then two mini lines will be generated in each mini line and then repeat the same process over and over again, each process producing the same two tiny lines, it kept going and going and it is called infinite.