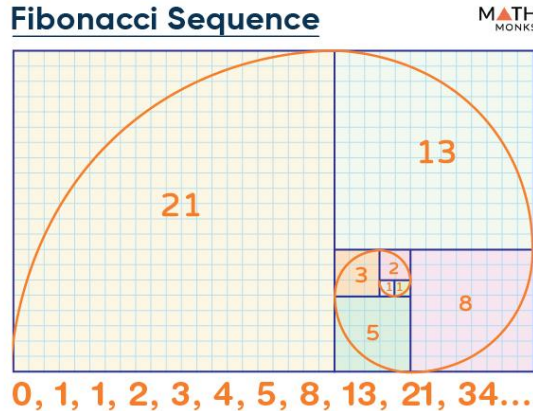


Fibonacci Sequence

January 2026 Art Docent Lesson
K - 5th

fibonacci
sequence
0, 1, 1, 2, 3, 5,
8, 13, 21, 34,
55, 89, 144,
233, 377, 610,
987, 1691,
2584, 4181...



Leonardo Bonacci c. 1170 - c. 1250 aka Fibonacci

An Italian Mathematician

From the Republic of Pisa

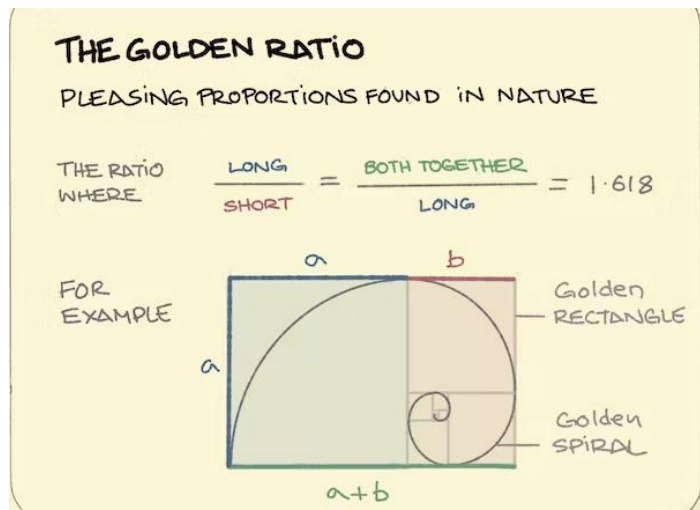
Considered the “most talented
Western Mathematician of the
Middle Ages”



Fibonacci Sequence or the Golden Ratio

A series of numbers where each number is the sum of the two preceding ones:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55...



It is a mathematical sequence that can be used to create the shape of a spiral.

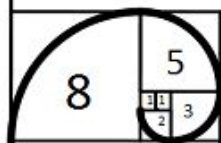


$0 + 1 = 1$
 $1 + 1 = 2$
 $1 + 2 = 3$
 $2 + 3 = 5$
 $3 + 5 = 8$
 $5 + 8 = 13$

.....

55

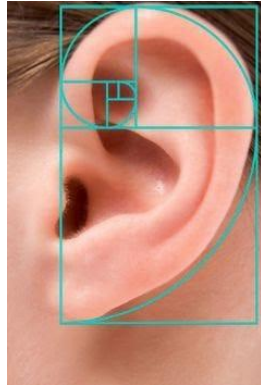
34



13

21

Examples of the Fibonacci sequence in nature:



Examples of the Fibonacci Sequence in Art:

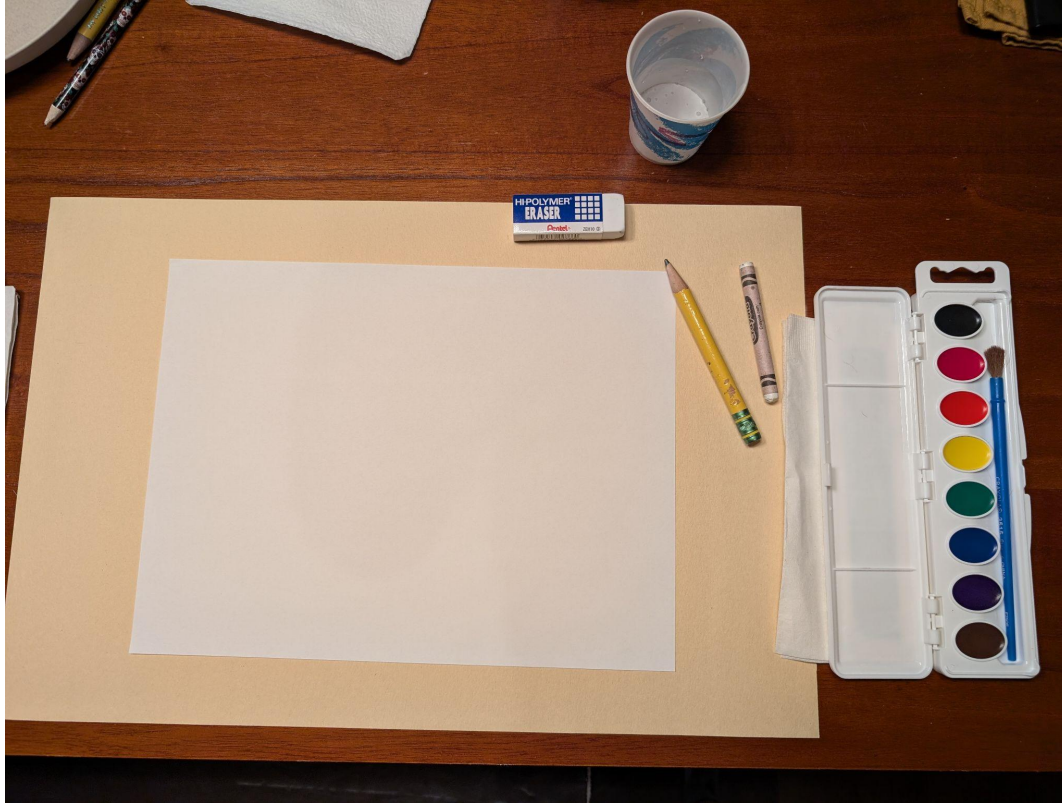


Vincent Van Gogh's Starry Night



Hokusai's The Great Wave off Kanagawa

Materials for the project:



Watercolor paints

Paint brush

Cup of water

Paper towel

Pencil and eraser

White crayon

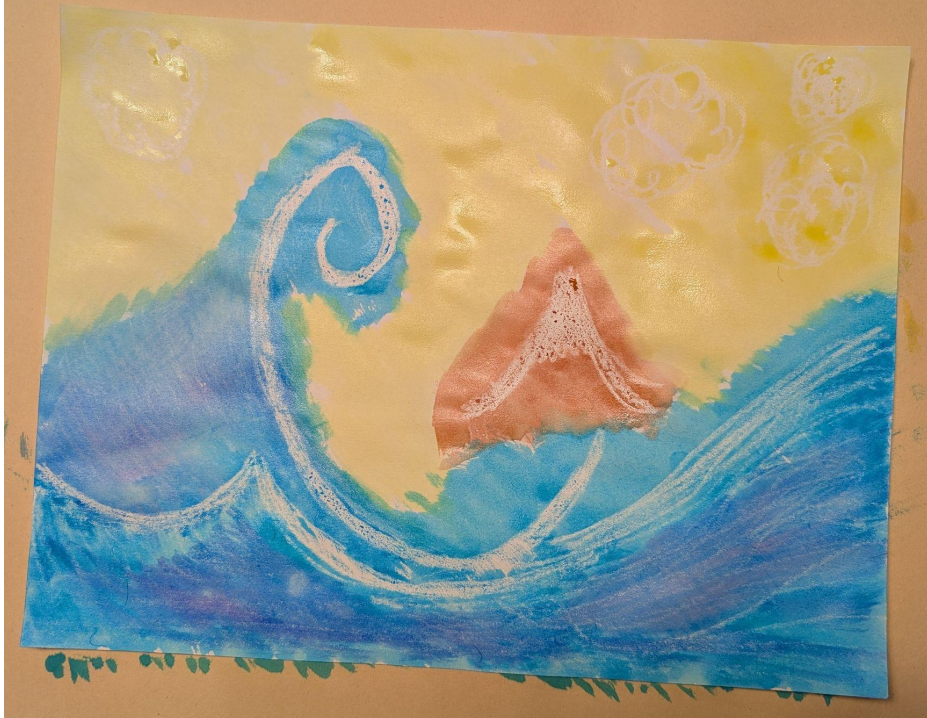
Paper

Tan paper to protect the desk

You can try your interpretation of “Starry Night”



“The Great Wave off Kanagawa”



Or your own design (use some spirals)

Watercolor Painting Tips:

(suggest use the camera and demo to the students)

Before you first use a color, add two drops of water and mix.

You need to control how much water you use. Add more as you go, and as needed. Don't be afraid to try to find the correct amount for your own project.

Start light and build the color on your paper.

Thoroughly clean the brush before you use another color. Try to not mix colors in the palette. If you need to mix, do it on your paper. Have fun.

Please leave each palette open so the paints can fully dry and be ready for the next class.

Alternative Ideas: Drawing animals using the Golden Rule

