

MATH AND ART

FAMILY LEARNING ACTIVITY: PREK– 5TH GRADE

GOAL: Explore the ways math and art are connected by creating a bar graph cityscape using the digits of Pi.

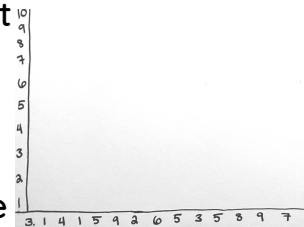
MATERIALS:

- White Paper
- Pencil
- Crayons
- Watercolors
- Paintbrush
- Small cup
- Painters tape
- Ruler

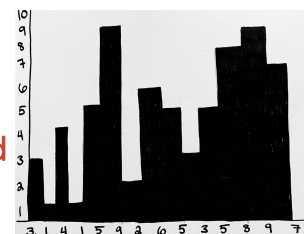
3.14159
265358
979323
846264
338327

STEPS:

1. Write as many numbers of Pi as will fit across the x-axis at the bottom of your paper in pencil. Draw a line just above the number Pi. Write the number 1 in the bottom left corner of your paper, just above the line. Draw the number 10 in the top left corner. Fill in the numbers 2 through 9 along the y-axis between 1 and 10. Draw a line along the edge of your numbers.



2. As you create your bar graph, make sure each number bar is connected. **Use a ruler to keep your bars straight and tall like skyscrapers.**



3. Color in your bar graph with a dark colored crayon.



FUN FACT!

The symbol for Pi has been used for over 300 years!

What is Pi? Find out in this video:

<https://youtu.be/De0JKAFqCy0>

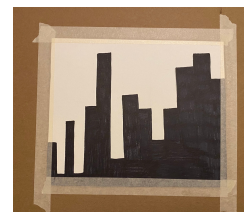
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HOW DO WE USE MATH IN ART?

4. Once your bar graph is colored in, cut off the graphing numbers on the bottom and side edges of your paper.



5. Tape the edges of your paper down on a flat surface.



4. Finally, use your watercolors to paint the background of your city. Think about what time of day it is or what season to come up with the colors of your sky.



Finished artworks

DISCUSSION:

- How is math used in our everyday lives?
- How have you used math while making art in the past?
- How are mathematicians and artists similar?

QUICK TIP:

Don't worry about painting over your drawings! The wax in the crayon will resist the paint.



FOR MORE DETAILED INSTRUCTIONS, INFORMATION, AND IDEAS, VISIT:

For more fun facts about Pi: <https://www.piday.org/pi-facts/>

Check out an artist who also uses Pi as inspiration:
<https://www.micajahbienvenu.com/pi-in-the-sky-iii>