

STEM in the News

Carnegie Mellon University computer scientists and mathematicians have resolved the last, stubborn piece of Keller's conjecture, a geometry problem that scientists have puzzled over for 90 years. By structuring the puzzle as what computer scientists call a satisfiability problem, the researchers put the problem to rest with four months of frenzied computer programming and just 30 minutes of computation using a cluster of computers. "The problem has intrigued many people for decades, almost a century," Heule said of Keller's conjecture. "This is really a showcase for what can be done now that was not possible previously."

Resource:

<https://phys.org/news/2020-10-scientists-year-old-geometry-problem.html>

"Pure Mathematicians just love to try unsolved problems- they love a challenge." - Andrew Wiles

STEM Career Spotlight

In 2018 the median salary of a mathematician was \$101,900. You need a higher degree in mathematics, however, some positions are available for people who have just a bachelor's degree in mathematics. Almost all jobs require math, but the ones that require a mathematics degree are statistician, mathematician, actuary, and many more. A job in mathematics is both exciting and highly paid.

STEM in History

Signs of counting were discovered around 50,000 BCE, with those small steps an entirely new system was formed. This caused a revolution in the mathematics world. In 3000 BCE the Sumerian people of ancient Mesopotamia created a written language and around this time they created the first school for Mathematics. By 2000 BCE when Sumer became a part of Babylon people understood algebra and geometry. During this period, Babylonians and Ancient Egyptians were aware of the number (π) pi, the ratio of a circle's circumference to its diameter. At approximately 1500 BCE, the Babylonians were also aware of Pythagoras' theorem, which shows how the lengths of the sides of right-angled triangles are related.

STEM Across the Curriculum

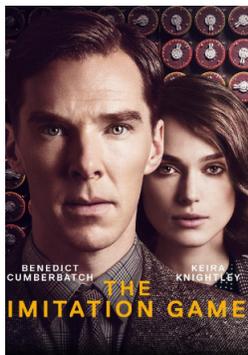
Grow Some Plants

Disciplines- Math, Science and ELA

Activity- Get two pots of soil. Put some seeds of any type, and label them. This is very important because you will need to put different amounts of water in them. For example you will put one cup in pot A and 2 cups in pot B. Do this for a month and record which plant grows more healthy.

STEM Movies

The Imitation Game is set at around 1939 when a British agency tried to crack the Nazi's code which was unbreakable to do. This movie is relevant to the 21st century workplace. It



brings science, technology, engineering, and math to the center of the learning and uses the skills required in those fields as accelerators and integrators of the curriculum throughout the school. Three major

lessons of this movie are do good work to get good work, welcome the outsider, and sometimes it takes a bit of bravery to accomplish a big thing.

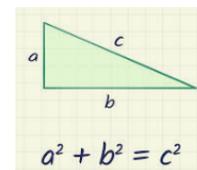
"Mathematics is not about numbers, equations, computations, or algorithms it is about Understanding." - William Paul Thurston

#STEM@ADM Spotlight

At Alice Drive Middle School, we have many math programs. We also have many STEM classes that involve math. Math is one of the biggest skills that students need to have. In STEM Tech classes we use math for all kinds of things like spacing, times, calculations, etc. We are using math in this newsletter too. So all Alice Drive students use math for their everyday school work.

Famous STEM Person

Pythagoras was a Greek philosopher who made major contributions to mathematics, astronomy and the theory of music. He was most famous for being the first to prove the Pythagoras' theorem which was well known to the Babylonians 1000 years earlier. It is used to find the hypotenuse in a right triangle.



STEM Challenge

Do you want to make your own color puzzle while using math? Let's make one!

Materials: Paper, Color pencils, Normal Pencils.

Step 1: Grab a piece of paper and draw anything you like.

Step 2: Divide the drawing into parts and label them with equations. Don't put the answer!

Step 3: Have the color box on the side so that you know what answer gets colored in with.

Step 4: Test out your creation!

STEM Puzzle

DDTAION: _____

VIDDEI: _____

AHMT: _____

UBSCTRA: _____

DDA: _____

RAFTCOINS: _____