

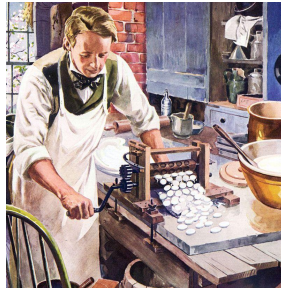
the Daily STEM

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STEM + Candy

Have you ever eaten those tiny candy hearts with the words on them? Did you ever wonder how they are made? In the 1840s, Oliver Chase invented a roller machine that could cut circles out of dough. He realized it worked to cut candies too. His brother Daniel invented a machine that could stamp sayings on the candies, and in 1902 the first Sweethearts were made. Some of the first sayings like “Be Mine,” “Be Good,” and “Kiss Me” are still used today, but new sayings are added each year. What other uses could there be for a machine that cuts by turning a crank? What kind of candy would you invent?



Watch how they're made: bit.ly/31AUSId
Learn more about the invention: bit.ly/31Bnwc4

STEM in the News

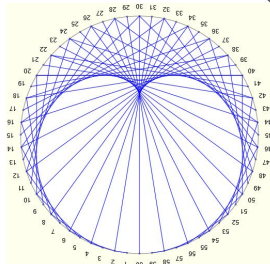
What if you could walk into a store, pick out the items you want to buy, and leave without having to stand in line to pay? According to some companies, that's the future of stores. The key to making it work is STEM. Amazon has tested a few stores with no cashiers using their “Just Walk Out” technology. It uses cameras and sensors to detect what you pick out, then bills your Amazon account. 7-Eleven just opened a store in Texas that uses an app to let customers check in, then bills the customer when it senses the phone leave the store. “Ultimately, our goal is to exceed consumers' expectations for faster, easier transactions and a seamless shopping experience,” says Mani Suri. What kind of problems would there be to stores like this? What would be the benefits?



To learn more: bit.ly/2SuH6T9

STEM Challenge

A Cardioid is a heart shaped curve that can be made in a number of different ways. The easiest method is to take a circle, divide the edge into 60 equal spaces, and number them 1-60. To make the cardioid, make a line connecting each number to 2 times the number...1 to 2, 2 to 4, 7 to 14, and so on. When you get to 31 ($31 \times 2 = 62$) you subtract $62 - 60 = 2$, so 31 connects to 2. Try making one by printing the template, and maybe you could even turn one into a Valentine's card or decoration. Watch the tutorial: bit.ly/2H4Z0GG



Download the circle template here: bit.ly/39jRunz

The Puzzle

How can you arrange 7 trees so that there are 6 straight lines that contain 3 trees each?

Last week's answer:

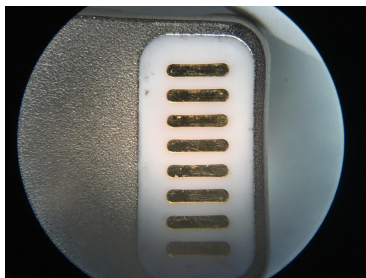
12-12-2121 and 03-03-3030 are the next palindrome days that work worldwide...in some parts of the world 12-02-2021 or 01-12-2101 are palindrome days too

The Quote

“I do not think there is any thrill that can go through the human heart like that felt by the inventor as he sees some creation of the brain unfolding to success... such emotions make a man forget food, sleep, friends, love, everything” -Nikola Tesla

Mystery Photo

What's under the microscope?
(answer in next issue)



Last issue's answer:
A postage stamp

