the Daily STEM

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STEM + Football

Have you used a green screen to record a video before? The app or program you use looks for the green color and replaces it with whatever you want, a picture of the beach or a video of a jungle. A similar

technology was developed by Stan Honey in 1998 to show TV viewers how far a football team had to go for a first down. Using computer models of the field and lots of cameras,



the line "magically" shows up in the right spot. They even programmed the computer so the line doesn't show up on player uniforms. The technology has some difficulty during snowy games, but even then they can add numbers to the field over top of the snow. What else could this technology be used for?

To learn more, watch this video: <u>bit.ly/36FYGIR</u> To learn more about the inventor: <u>bit.ly/2uQ7nDg</u>

STEM Challenge

Have you seen a "Magic Square" before? It's an arrangement of the numbers 1-9 in 3 rows of 3, and each

row, column, and diagonal add up to 15. It's a fun puzzle, but trying to do it on paper can be tough Instead, grab nine water



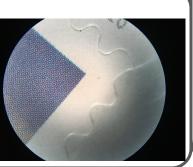
bottle caps and a sharple and write one number on each cap. Then try to arrange the numbers to make a magic square.

Bonus idea: find a few more caps and write $+ - x \div =$ on them and try to make the biggest equation!

. Mystery Photo

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

Last issue's answers: A Hershey's Kiss



STEM in the News

Do you like to play video games? Just like professional teams that play football or soccer, there are teams that play video games. On February 22, the NBA 2K League will have their player draft to select new players for their

teams. Each

player gets a 6 month contract for \$33-37,000, health insurance, free housing, and a chance for endorsements. This Year the league will have 23 teams, each with six



players. Kory Taylor from Detroit hopes to get drafted, but knows it's hard work. "I don't think I'm going to be nervous until the draft day." Players must be willing to move, practice long hours, and there's no guarantee the job will last. To learn more: <u>bit.ly/2Oe9nMg</u> or more about the NBA2K League <u>2kleague.nba.com</u>

The Puzzle

A word or phrase that can be written the same forward and backward, like RACECAR or TACO CAT, is a palindrome. February 2nd is a Palindromic Day because the date can be written 02-02-2020. When are the next two times this will happen?

Last week's answer: ST ND RD <u>TH</u>...1ST, 2ND, 3RD, 4TH

Did You Know

Have you ever seen a rose? It's a beautiful flower, even though it has thorns. Every Valentine's Day approximately 200 million roses are sold worldwide.



- -The largest rose was 33 inches in diameter
- -The smallest roses are the size of a grain of rice
- -There are 100 species of Rose, but no black colored roses (the closest is a very dark red)

-A rose also grows a fruit, a Rose Hip, which is high in Vitamin C and can be used to make jelly

-A rosebush has covered the wall of the Cathedral of Hildesheim in Germany for over 1000 years Find out more: <u>bit.lv/2RMnz1u</u>