the Daily STEM

Volume 1 Issue 5

May 19 2019

STEM + Agriculture

Technology and engineering aren't just helping make better phones and computers. Improvements in STEM are changing how farmers work too. Imagine having a tractor that can drive itself? Or how about a drone that can help herd sheep or cattle? One improvement that's already being tested is machines that use cameras to detect weeds. They then spray only the weed instead of the whole field. "The savings on chemicals is huge, but there's also savings for the environment from using less chemicals" says Sam Bradford, a farm manager. What if you had to design a machine to help improve farming.

What would you invent? Would it be better to have a big or small machine? To read more about these ideas, head to: vhoo.it/2JMOzu2



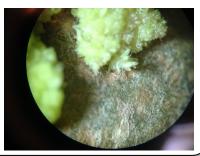
The Puzzle

Many people have heard it, but nobody has seen it. It never speaks back until you speak to it first. What is it? (answer next week) Last week's answer: 6 is really 5+1, and when you multiply by evens you get 10+2 (or multiples of 10+2) which make the pattern.

Mystery Photo

What's under the microscope? (answer next week)

Last week's answer: ground coffee



STEM in the Summer

For many kids, the school year is almost over and summer is about to begin. Did you know that you can still do STEM even when you aren't in a classroom? Here's a few ideas to get you started:

- -Fix a broken tov
- -Plant a garden
- -Make a board game
- -Learn to identify trees
- -Make a stop-motion video
- -Invent something
- -Try origami
- -Look at the stars
- -Go to a museum

-Build a raft from empty water bottles or jugs Print a list of 77 ideas (in English, Spanish, or Arabic) at dailystem.com/resources



STEM in the News

Most everyone has had an ear infection at some point in his or her life. What if you could use things in your house to detect an infection? Researchers have devised a way to use an app on a phone to check for fluid buildup in the ear. Paper, tape, and scissors

are used to make a cone that is attached to a phone around the microphone and speaker. Then the phone uses sound waves that bounce off the



eardrum and back to the phone. Healthy ears respond differently than infected ears.

To read more: bit.ly/2VvWzC6

The Quote

"To invent, you need a good imagination and a pile of junk."

-Thomas Edison