The Daily STEM

STEM in the News

Did you ever have to wear a bandage over a cut or a wound? One of the problems with bandages is that they can allow germs to grow, and those germs could make you sick. Engineers have started using a special type of UV light to kill germs. You may have seen these lights on hand dryers in public restrooms, but they are also used in hospitals to clean the tools that doctors use. Now some researchers have found a way to add small LED lights to bandages. The lights flash their UV light at the wound, helping to kill bacteria that can cause infection. So far, the one problem with this innovation is keeping the lights powered without a bunch of heavy batteries. If this idea can be improved, it could help wounds heal faster and even reduce the need for antibiotics. These bandages could also help pets or animals on a farm! Can you think of other places that would be good to put UV light to kill germs? Learn more about the bandages: **bit.ly/45yBJXu**
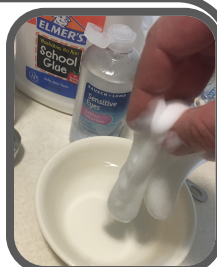
The Puzzle(s)

1) What has rings, but isn't an onion, can be chopped, but isn't a carrot, and is made of wood, but isn't a table?
2) Suppose you are 4 feet tall. If you hammer a nail into a tree at your height, then go back in 3½ years. If the tree grows 8 inches every year, and you grow 2 inches every year, how high will the nail be?

Decode the answer using e=a, f=b, g=c, h=d
1) e xvii   2) jsyv jiix lmkl (xviiw kvsa jvsq xli xst)
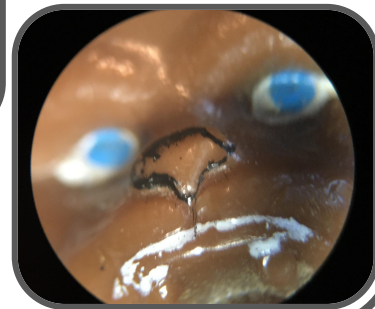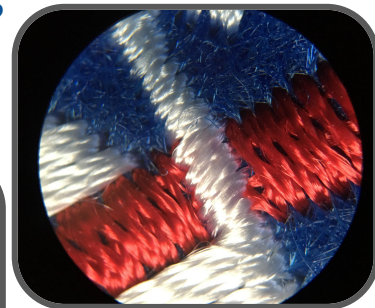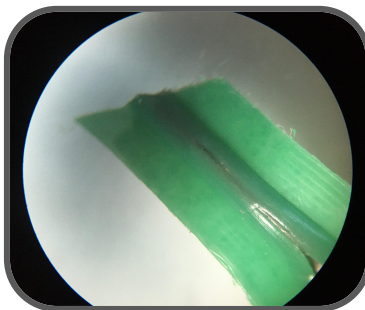
STEM Challenge

Did you ever make slime? Most slime recipes use Borax, a washing powder that contains the element Boron. But did you know that some contact solutions also contain Boron and can be used to make slime? Try mixing about 1/4 cup school glue, 1/4 teaspoon baking soda, 1/6 cup water, and 1 1/2 Tablespoons contact lens solution containing boric acid. Then compare it to your favorite slime recipe!

STEM Career: Biomedical Engineer

Do you like learning about the human body, but also like designing things? A **Biomedical Engineer** is someone who uses knowledge of biology with the design principles of engineering. They can design artificial organs to replace failing ones. They can create new and improved replacement parts, such as hips, knees, arms, and legs. They can even help design or repair equipment used to help people in hospitals. Some biomedical engineers design exercise equipment that helps people recover after injuries. To become a biomedical engineer, it is important to take biology and anatomy classes to figure out how the human body works. It is also important to study engineering skills such as robotics, CAD, and coding. As life expectancy and technology keep increasing, jobs like biomedical engineering will become even more important. If you think this sounds like an interesting career, watch this video: **youtu.be/hBKj9Uh1PgI** or learn more: **bit.ly/3PqmXMV**

Mystery Photos

Can you identify the mystery items under the microscope?

Decode the answer using e=a, f=b, g=c, h=d
rewe texgl
xamwx xmi
gliafegge jmkyvi