

*“Scientists believe in things, not in person”. -
Marie Curie*

STEM in the News

Industries are mass producing chemicals to help prevent the spread of coronavirus in schools. Schools use chemicals to destroy and stop the spread from entering the human body through the nasal cavity. These chemicals that help stop the spread are used in every class and also all around the school. Ammonium chloride, the chemical that is the main factor in stopping the virus, can be found in clorox and lysol. Stay safe!

STEM Career Spotlight

A person who has studied chemistry is called a chemist. A chemist's salary is \$72,610 a year. In



order to be a chemist you're going to need a bachelor's degree in chemistry or in a related field. Some employers do prefer experience and a

master's degree. Other positions may require a PhD especially for research positions. Chemists do experiments to innovate products and also invent their own. Chemistry is a very important job because you make products more effective.

STEM in History

The earliest knowledge of chemistry was concerned with pottery, metallurgy, and dyes. These crafts were developed with essential skill, but with no understanding of the principles involved. The father of chemistry is commonly known as Antoine Lavoisier. He is known for developing “modern chemistry” and his book “Elements of Chemistry.” He compiled the first complete list of elements, helped to create the metric system, he helped standardize chemical nomenclature, and discovered that mass retains its form even when it changes form. Chemistry has come a long way from when it was first introduced to the world and it still continues to revolutionize in modern times.

STEM Across the Curriculum

Clean your house

Disciplines- Science, English

Activity- Go to your local store and buy two different cleaning products, for example windex. Once you get back home grab a rag and give one spray of each on a dirty window. After you clean each window record which product did the best job at cleaning the window. After this experiment you and family can clean your house efficiently.

STEM Movies

Flubber is a movie about a professor who experiments with new energies. He thinks this trick will save a colleague when he finds a flubber in his experiment. This makes him miss his own wedding, when he is trying to get his girlfriend back with a new experiment. Then he runs into trouble while the flubber is trying to do things on its own. Chemistry can be all fun but you always have to be safe while using chemicals. Chemistry involves elements, compounds, atoms, and molecules which means there would be reactions happening with all these substances, and you don't know what might happen. You need to make sure that you are careful when you are doing chemistry.

"Every aspect of the world today - even politics and international relations - is affected by chemistry." - Linus Pauling

#STEM@ADM Spotlight

Seventh grade science class is taught by Mrs. Barret at Alice Drive Middle. She has a unit that teaches chemistry. She uses many different experiments to help students understand how chemical reactions work. She also takes her students into science labs to see chemical reactions in action. This class is a very effective way to learn how chemicals react and what they can accomplish.

Famous STEM Person

Alfred Bernhard Nobel was a Swedish chemist, engineer, inventor, businessman, and philanthropist. He held 355 different patents, dynamite being the most famous. He owned Bofors, which he redirected from its previous role as primarily an iron and steel producer to a major manufacturer of cannon and other armaments.

STEM Challenge

Elephant's toothpaste

Materials: hydrogen peroxide, dish washing soap, food coloring, 2 containers, yeast, and warm water

Step 1: Pour a $\frac{1}{2}$ cup of hydrogen peroxide, $\frac{1}{4}$ cup of dishwashing soap and a couple drops of food coloring into a container and then stir it.

Step 2: In a separate container, mix a packet of your yeast and warm water then let it sit for 5 minutes.

Step 3: Go to a place where you don't mind getting foam everywhere. Once ready mix the yeast mixture with the beginning mixture.

Step 4: Watch the chemical reaction occur right in front of you!

STEM Facts

Did you know that glass is a liquid, but it moves very, very slowly?

Also, if you pour a handful of salt into a glass of water, the water level will go down.