

STEM in the News

Just recently, a tragic disaster occurred in Colorado, and has also been occurring in California. Living organisms such as trees have been burning and releasing gases that are harmful to the atmosphere. These gases can be inhaled by animals and could destroy the lungs of organisms. It has also caused many towns and cities to be covered in smoke and ash. This occurrence has a major effect on the ecosystem around us. We can try and prevent these disasters from happening by making sure that we are careful with the smoke that we are enforcing into the atmosphere.

“A cell is regarded as the true biological atom.” - George Henry Lewes

STEM Career Spotlight

A great biologist makes around \$60,000 a year. Biologist’s salary can be as high as six digits, but that is if you are one of the top biologists in the country. If you want to start in biology you will need an undergraduate degree in biology. If you want to go deeper into science, such as becoming a marine biologist, you will need significantly more years of college. It is a lot harder to do, but your hard work will pay off. A plus is that you are able to study wildlife around you as well!

STEM in History

The word biology is derived from the Greek words “bios” meaning “life” and “logos” meaning “study”, biology is a large branch of science focused analysis of living organisms and their vital processes. The Ancient Egyptians are responsible for advancing knowledge of the human body. However, Aristotle is credited for the development of sequential knowledge in biology, and is considered the “father of biology” due to him revealing his thoughts about various aspects of the lives of living organisms.

STEM Across the Curriculum

Build a birdhouse

Disciplines- Math, Science, English

Activity- A fun cross curricular project could be building a birdhouse. Learn geometry, science and ELA in one fun project. Go to your local hardware store and grab all of the materials that you will need. Measure all the pieces carefully and, once you assemble your birdhouse, watch the birds and see if your house works. Record notes on a sheet of paper. If you want to take it a step further, research the type of bird or animal that is living in your cozy birdhouse. Remember to keep notes on your observations.

STEM Movies

A movie that helps learn more about animals is *March of the Penguins*. It is about penguins moving to another location to raise their newborn chicks. The male is in charge of



bringing food back to the nest for the mother and the newborn to feast, while the mother stays back at the nest taking care of the child and guarding their nest from any predators that put them in danger. This movie helps us

understand better how biology is really important to us because it explains how the living world functions, evolves, and interacts.

“Biology will relate every human gene to the genes of other animals and bacteria, to this great chain of being.” -Walter Gibert

#STEM@ADM Spotlight

Project Lead The Way, or PLTW, Medical Detectives is a STEM class at Alice Drive Middle School. Students are involved in hands-on projects to diagnose diseases. They also learn about systems of the body such as the nervous system, and learn all of their functions. This class is an exciting thing to do if you show interest in biology. This class will also strengthen your knowledge of medicine. It is fun, hands on and very engaging.

Famous STEM Person

Charles Robert Darwin was an English naturalist, geologist and biologist, best known for his contributions to the science of evolution. His proposition that all species of life have descended over time from common ancestors is now widely accepted, and considered a foundational concept in science.

STEM Challenge

Would you like to make your own egg ball? Let's create one by using a simple technique!

Materials: jar, egg, and vinegar.

Step 1 : Grab your jar and set it down on a hard surface.

Step 2: Grab your vinegar and fill it up about $\frac{3}{4}$ of the jar.

Step 3: Grab your egg and place it in the jar with the vinegar.

Step 4: Close your jar with your lid and wait about 2-3 days.

Step 5: While you wait you will see the magic take action!

<https://uniavisen.dk/en/five-biological-experiments-you-can-do-at-home/>

STEM Facts

Did you know that there are more non-human cells in our bodies than human cells!

Did you know that there are more than five senses! The other three that we are not familiar with are balance, pain, and temperature.