



“All of those cars were once a dream in somebody’s head.” - Peter Gabriel

STEM in the News

The company Tesla has helped society by creating cars that innovate the way we drive. Elon Musk, the owner of Tesla, has put in hard work to help the people drive safely and efficiently. Elon



Musk is also the owner of SpaceX, a company that is trying to create an

efficient and cheap way to travel into space. He has recently sent a rocket to the ISS with cargo to help the astronauts that are staying up there for several months. Tesla and SpaceX are only two of many companies that are creating ways to use transportation safely and proficiently.

STEM Career Spotlight

One of the coolest jobs to have is a pilot. The average salary of a commercial pilot is \$130,000 a year. They can travel to various destinations around the world, which is a great perk. The job of a pilot is dangerous because they need to know what to do in life threatening situations. In order to become a pilot, you need several degrees in STEM as well as a considerable experience.

STEM History

In 5300 BC, a “canoe-like” structure was used for water transportation, initially it was built by burning logs and digging out of the burnt wood. Later, the Egyptians invented the sailboat while the Romans built roads across Europe. During the Industrial Revolution technology became more effective, many new forms of transportation were invented such as motor cars, and airplanes. The first car with an internal combustion engine was developed in 1906, and the first highway was made by Loudon McAdam. Standards of people living around the world radically increased because for the first time trade was safer, and more reliable.

STEM Across the Curriculum

Learning the Parts of a Car

Disciplines- Technology, English

Activity- In this activity you are going to try to learn the parts of a car. What you will need to do is research each part separately. A way to help you is to write down parts’ names and their functions. Once you have done all of the research, see how all parts work together in one mechanism. This is one way to learn about transportation that we use today. Repeat the steps to learn about a different type of transportation.

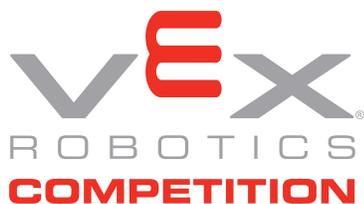
STEM Movies

Horatio's Drive: America's First Road Trip, is about the first cross-country automobile journey in the United States. In 1903, Americans considered automobiles practical for short trips only. Horatio Nelson Jackson believed differently. He bet a man fifty dollars that he could drive an automobile across the country. Nelson paid a man to accompany him on a trip that attempted to go from California into Oregon and the Rocky Mountain states, then across the Midwestern U.S.A. and finally to New York City. Jackson's trip made him a media sensation.

"What's unique about transportation is that it's one function that repeats itself throughout the supply chain." - John Murphy

#STEM@ADM Spotlight

Alice Drive Middle School offers a PLTW automation and robotics class that allows students to build structures made out of VEX parts. Last year students built cars with the capability to carry and move objects freely. It allowed the students to see a simple way of transportation while encouraging them to use their imagination. The students created and used their creativity to assemble their own models.



Famous STEM Person

Wilbur and Orville Wright brothers are American inventors and pioneers of aviation. In 1903, they achieved the first powered, sustained and controlled airplane flight; they surpassed their own milestone two years later when they built and flew the first fully practical airplane. In their very first flight they were in the air for 12 seconds and covered 120 feet in that time. Now airplanes can fly for several hours and cover many miles.

STEM Challenge

Let's create a paper airplane at home.

Step 1: Grab a single piece of paper and fold it vertically.

Step 2: Unfold the paper and at the top of the paper pull both corners to the top center.

Step 3: Once you have the corners pulled in then fold the paper back over.

Step 4: Pull the right and left sides back and then crease them.

Step 5: Enjoy your homemade paper airplane!

STEM Facts

Random fact about cars you might not have known- The best selling car of all-time is the Toyota Corolla.

Surprising fact about planes you might not have known- A Boeing 747 is made up of 60 million parts.