
STEM in the News

The famous technology manufacturing company, Apple, issued a press release that stated revenue for shareholders would fall short during the March quarter. There were two reasons for this issue. One, Apple's prominent iPhone supply chain in China would be temporarily constrained due to a slow-ramp up of manufacturing facilities. Second, demand in China was already plummeting, as Apple had closed retail stores all across the country. The drop in revenue for shareholders is mainly due to the COVID-19 pandemic. Apple isn't the only company experiencing the disruptions from the virus, as many others around the world are seeing factory shutdowns and lack of inventory from distributors and resellers.

Source:

<https://money.usnews.com/investing/stock-market-news/articles/2020-03-10/how-coronavirus-is-affecting-the-global-supply-chain>

"Life is not fair; get used to it." - Bill Gates

STEM Career Spotlight

Dental laboratory technicians make dental appliances. They create things such as crowns, bridges, and dentures to help improve an individual's teeth. They work hard behind the scenes to provide someone with healthy, shining teeth. The average pay for a dental technician is \$48,491 per year.

Education: At least a high school diploma

"Imagination is more important than knowledge." - Albert Einstein

STEM in History

The Industrial Revolution was a period where manufacturing developed into something that resembles what it is today. During this time, people began focusing on manufacturing industries. In 1792, Eli Whitney invented the cotton gin, which profoundly improved productivity in the vital cotton industry and essentially planted the seeds for an industrial revolution. The American Industrial Revolution took off in the 1820s when machine production, coal power, and railway construction drastically increased production. Since these times, manufacturing has continued to develop with the help of individuals such as Elon Musk, Tim Cook and many others.

STEM Across the Curriculum

One way to incorporate the concepts of manufacturing in science classes is through a Stomp Rockets project. In this activity, students gain an understanding of performing a controlled experiment and how different variables affect the distance travelled by a stomp rocket.

Source: <https://www.siemensstemday.com/educators/activities?g=6>

STEM in Sports

Sporting goods manufacturers are retooling their distribution, sales, and marketing strategies as the sporting goods retail sector becomes increasingly volatile. Major big-box chains have gained leverage over suppliers as they acquire smaller retailers that have fallen into bankruptcy. Large sports equipment manufacturers are increasingly selling products directly to consumers through their own websites, allowing them to offer lower prices or reap higher profit margins by bypassing retailers. The industry competes with vertically integrated retailers that manufacture and sell their own products.

Source: <https://http://www.firstresearch.com/Industry-Research/Sporting-Goods-Manufacturing.html>

“Coming together is a beginning, staying together is progress, and working together is success.” - Henry Ford

#STEM@ADM Spotlight

Mrs. Gallegos teaches STEM Engineering at Alice Drive Middle School. She utilizes technology in her classroom with challenges that are solved through the Engineering Design Process. Manufacturing is a part of this process where students can create concepts to form into prototypes in order to solve challenges. Mrs. Gallegos does an excellent job of incorporating the ideas of technology and manufacturing in her classroom.

Famous STEM Person

Steve Jobs was the manufacturer of the first iPhone in 2007 and the co-founder and CEO of Apple and Pixar. Jobs went on to create the Apple iPad Family and the iPod before his untimely death on October 5, 2011. Steve Jobs revolutionized the way we listen to music in the form of the mp3 player with his iPods, and bringing smartphones and tablets into the tech race. His drive to create innovative products changed the way that we view mobile computing, and will probably affect what we expect of mobile media for years to come.

STEM Challenge

“Manufacture” Your Own Hand Sanitizer

Materials: 3/4 cup of rubbing alcohol, 1/4 cup of aloe vera gel, 10 drops of essential oil or lemon juice.

Directions:

1. Pour all ingredients into a bowl, ideally one with a pouring spout like a glass measuring container.
2. Mix with a spoon and then beat with a whisk to turn the sanitizer into a gel.
3. Pour the ingredients into an empty bottle for easy use, and label it “hand sanitizer.”

Source:

<https://www.healthline.com/health/how-to-make-hand-sanitizer#how-to-make>

STEM Puzzle

Riddle: The manufacturer doesn't need it, the buyer doesn't want it, and the user doesn't know



he's using it. What is it?

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