STEM Monthly Calendar

October 15 – November 30

Cybersecurity Awareness and **American Indian** Heritage Month

Cybersecurity Awareness and American mulan Heritage Month							
Monday	Tuesday	Wednesday	Thursday	Friday			
October 17	October 18	October 19	October 20	October 21			
In 1989, A 6.9 magnitude earthquake struck San Francisco. Earthquakes occur when two blocks of earth slip past each other. The surface where they slip is called the fault.	keren Elazari began her career as a hacker and is now a cybersecurity expert. Her TED Talk has helped shape the global discussion about how hackers can play an important role in protecting society from cyber-attacks.	In 1953 the first wind turbine to use generate electricity for local utility system was put into service in Grandpa's Knob, VT.	Robert M. Lee was a Cyber Warfare Officer in the U.S. Air Force before becoming the Founder and CEO of Dragos- a cybersecurity company. One recent project was to figure out the cause of the Ivano-Frankivsk power grid attack in the Ukraine. The attack caused 225,000 people to lose power in December 2015.	In 1879 Thomas Edison demonstrated an electric light bulb that lasted for 13.5 hours.			
In October 24 In October of 2011 the voice-activated personal assistant Siri was introduced by Apple.	Chris Domas is a cyber-security researcher and embedded systems engineer who specializes in reverse-engineering and visual abstraction in order to combat cyber-warfare.	October 26 1861: The Pony Express ended operations. It was put out of business because the first transcontinental continental telegraph line in the United States opened 2 days early and it allowed for instant communication.	October 27 Lorrie Faith Cranor began her research on password security as an Associate Professor at Carnegie Mellon University. In 2016, Cranor was appointed as the Chief Technologist for the U.S. Federal Trade Commission.	October 28 Code Talkers were initially Navajo who developed a code for the U.S. military during World War II. Ultimately there were at least 16 First Nations people who served as Code talkers for the army, marines and navy.			





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October 31

Computer Worms vs Viruses

Worms are stand-alone software while viruses require a host program/file. Both wreak havoc on the computers.

November 1

Susan La Flesche **Picotte** (1865-1915), was the first

Native American

female doctor and gave back to her nation by building a hospital for the Omaha Nation.

November 2

1988: The cybersecurity industry began when the first computer worm caused extensive damage. It was designed to infect systems in order to count them.

November 3

Thomas David Petite of the Chippewa Nation holds 35 patents

and is a renowned inventor in the area of energy conservation and

technology. He developed the wireless mesh grid which led to the Smart grid that allows you remotely operate and monitor your energy usage from your mobile device.

November 4

1983: First computer virus was released by Fred Cohen on a Lehigh University computer system. The virus was able to install itself (infect) the system and others systems that were attached to Lehigh's system. A year later he coined the phrase "computer virus".

Mathematics

November 7

1660: Thomas de Lagny, who computed pi to 120 digits was born.

Pi:

1415926535 8979323846 2643383279 5028841971 6939937510 5820974944 5923078164 0628620899 8628034825 3421170679 8214808651 3282306647

November 8

1952: For the first time, major television networks used computers to predict the outcome of the



presidential election between Dwight D. Eisenhower and Adlai E. Stevenson.

November 9

On November 8, 1656 Edmond Halley was born. Halley used Newton's laws of gravity to calculate the orbit of comets based on the gravitational pull of Jupiter and Saturn.

November 10

Mary Ross (1908-2008) from the



Cherokee nation was the first female engineer at Lockheed Martin. She worked on the

U.S. race to the moon/NASA program and development of the Agena rocket.

November 11

Veterans Day honors living & deceased veterans. Calculate: There are ~24 million veterans living today. 8.1% are women. How many veterans are women? 35% of living veterans served in the Vietnam War. How many living veterans served in Vietnam?





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	November 14	November 15	November 16	November 17	November 10
	November 14	November 15	November 16	November 17	November 18
Science	1985: <u>Nature</u> magazine published the discovery of fullerene; a hollow, spherical molecule of carbon.	On November 14, 2014, President Obama made a Presidential Proclamation that November 15 is National America Recycles Day	1942: Work to create an artificial nuclear chain reaction began. The experiment was designed to support the Manhattan Project.	Ely Parker (1828-1895) of the Iroquois Nation was an engineer with the Treasury Department. He was also with general Grant when Robert E. Lee surrendered at Appomattox.	1883: Standard time in the U.S. went into effect in order to allow railroad travel to be synchronized. Before this, time was based on local "sun" time.
	November 21	November 22	November 23	November 24	November 25
Technology	1877: The invention of the "talking machine" better known as the phonograph was announce by Thomas Edison.	John Herrington (1958-) of the Chickasaw Nation of Oklahoma was the first Native American in space. He flew International Space Station on STS-113 Endeavour. Herrington logged over 330 hours in space including 3 "spacewalks".	1992: The first "smartphone" was released by IBM. Known as IBM Simon it was a personal digital assistant –PDA that made and received calls, faxes and emails. It even had a touch screen!	Sandra Begay-Campbell from the Navajo Nation is an engineer who works on photovoltaics at Sandia National Lab in New Mexico. She also works to bring solar energy to remote Navajo villages.	1973: In order to conserve energy during the oil embargo, the U.S. speed limit was decreased to 55 mph.
Engineering	November 28 1964: NASA launched Mariner 4 to conduct a flyby of Mars. Mariner 4 reached Mars and began sending back data on July 14, 1965	Al Qöyawayma is an artist, potter and engineer who holds a worldwide patent for Inertial Guidance System used on international and jet fighter aircrafts.	November 30 1934: The Flying Scotsman was the first steam locomotive to exceed 100 mph.		



