[**https://sciencetrek.org/sciencetrek/topics/robots/facts.cfm**](https://sciencetrek.org/sciencetrek/topics/robots/facts.cfm)

[**https://www.techtarget.com/searchenterpriseai/definition/robot**](https://www.techtarget.com/searchenterpriseai/definition/robot)

**What does it do?**

Robot is a word which comes from the Czech word “robota”, which means “forced work or labor”. Robots are practically just machines, some talk to us, some listen to us, perform tasks as we ask, as well as solve problems without be specified what direction from a user. Though, the most common uses of a robot have them acting as substitutes, or mechanical replacements for human labor, doing work for humans that robots would be better suited for, whether it’s a dangerous environment, difficult environment or just a plain boring one. Most robots are made to do repetitive actions, or tasks, which is the action of doing one task over and over again. In most cases, a human would slowly go insane at the thought of tightening a screw over and over for hours and hours, but a robot would do it without a second thought, let alone a single one. Examples of these could include how robots are used in factories for building things like cars, candy bars and other electronics. They are also mostly used in jobs which would be considered or classed as “too dangerous” for humans. An example of this could be a scouting drone which would be used to enter a building and, as the name suggests, scout a possible bomb threat location in the place of a human risking their own life to do the same. Robots are also used for medicinal purposes, military tactics, finding objects underwater and even now are being used to explore other planets in the solar system. Robotic engineering has helped people who have suffered great physical losses, whether it’s an arm or a leg, and overall robots are a great tool to help mankind. Although robots seem like a modern-day invention, the truth is that evidence suggests automations were created so far back as to the 1400s, ranging from simple toys to parts for religious ceremonies in ancient Greece and Rome. Jaques de Vaucanson was famous in the 18th century for his robotic invention of a human figure which played the flute and a robotic duck with an ability to flap its wings. These early robots were often controlled by ropes, wheels, air or water. There have been countless creations of robots through out history, though in the earlier times they were mostly created for entertainment purposes. Elektro was the first speaking humanoid robot, built in 1939, who could speak 700 words and perform tasks such as blowing up balloons. By the 1960s, robots were introduced into the General Motors automobile plant in New Jersey for moving car parts from one place to another. Robots have continued to advance over the years and have been a part of countless homes for many years. Some examples of robots which could be found in your house are toys, vacuums and even as programmable pets. Modern day robots are a part of many aspects of industry, medicine, science, space exploration, construction, food packaging, and now they’re even being used to perform surgery, to remove the risk of a human mistake. There are some robots with facial expressions, unmanned aerial vehicles (UAVs) that monitor hurricanes, robotic bees that help with crop pollination, and much more. The science of robotics will continue to advance, and it is safe to assume that we haven’t even scratched the surface of what robotic engineering can achieve. A big reason robots tend to be used instead of humans is because it’s often cheaper to use them instead of humans. It is easier to have robots do some jobs, and sometimes using robots is the only possible way to accomplish a certain task or requirement.

**What is the likely impact?**

The impact of robots and robotic engineering tend to be positive. Robots are made to be helpful and to make the completion of tasks and requirement more effective and more efficient than if they were to be attempted by their human counterpart. Robots are especially useful in space exploration because, unlike human explorers, they can survive in space for long periods of time and can safely do things that humans would be rendered unable to do. They can be built to do things that would be considered too risky or rather impossible for astronauts, for example, they can withstand harsh conditions such as extreme temperatures on distant planets, or high levels of radiation in a factory hazard. The robots are able to collect samples, take measurements and send pictures of their surroundings back to Earth. Some computers and robots have been developed to act with human-like behavior. A machine with artificial intelligence is one that can perceive its environment and change its behavior accordingly, while using tools at hand to solve problems or reach goals it has been programmed to achieve with its ability to comprehend and decipher the data it witnesses. Though, unlike in many of the popular movies, robots are unable to think or make decisions without human input; rather, they are tools to help us get things done, like a screwdriver. Robots are machines with programmed movements that allow them to move in certain directions or move with certain sequences. Though artificial intelligence has enabled robots to process information and to learn, they are still limited by the information which they are given. The problems they are instructed to solve and the functions they are programmed to perform.

**How will this affect you?**

Robots affect me in my day-to-day life, I use robots daily. Robots are everywhere in our daily lives and have an impact on the lives of almost everyone nowadays. Though it’s a controversial opinions, I believe a mobile phone is a robot and most people in our modern society both own and use a mobile phone throughout their daily lives and routine, whether it’s to contact another person, or to check the weather, or watch videos online or even to play some videogames to pass the time.