Robotics facts –

Floppy Flop –

Hi Kids, today – lets spend a little time learning about, you guessed it, Robots. It will not take very long and you can stop any time and come back later, but if you stay with me, we will learn some super fun and super important things about this awesome technology. So lets start – just say the pick what you want to start with

History of robots

Robots in Science fiction

How do robots work? or

Different uses of robots

const historySpeak = 'Lets talk about the history of robots and robotics – starting with who came up with these words. The first person to use the word robot was Czech writer Karel Capeck, in a play called Rossums Universal Robots or R.U.R. - The play has artificial people that are created in a factory to serve other people. The term robotics was coined by none other than Isaac Asimov – probably the most famous Science fiction writer ever. In 1956 George Devol created the first real robot and named it the Unimate. In 1961 Unimate went online at a General Motors factory in New Jersey.';

const scienceFictionSpeak = 'Robots and robotics have always been a favorite of science fiction writers. Let me talk a little bit about one of the most popular writers – Isaac Asimov. He came up with the term robotics, and also came up with the three laws of robotics, or asimov’s laws in the book I Robot. He created these laws to make sure that robots don’t harm people. The laws are used in many science fiction books about robots since then';

const howTheyWorkSpeak = 'Robots are really machines that are made to work similar to living beings. Of course they have many limitations – they are after all artificial, and not real beings. Unlike science fiction robots, real ones cannot think or make decisions. With artificial intelligence, robots have got some capabilities to learn from information that is given to it – but it is still limited by the data that humans feed them. All robots generally have 5 parts - a CPU which works like the brain, sensors - which work like human senses, actuators - which help them move, power supply - which give them energy - and finally, end effectors - these are like tools that help them work';

const usesSpeak = 'Robots work in many ways to help us. They are being used in more and more fields every day to do all kinds of things for us. Lets look at 3 different areas they are being used today - medicine, education and cars. Whci one would you want to know about?';

const greekHistorySpeak = 'The ancient Greek god Hephaestus was believed to build himself mechanical assistants out of gold. Around 400 B.C.E., the Greek mathematician Archytas of Tarentum built a mechanical bird to try and better understand how birds fly.';

const arabHistorySpeak = 'Some of the earliest examples of automata, or a device that works by itself, is seen in the work of the Arab polymath Al-Jazari in the 13th century His creations were known for their sophistication, some of his most famous automatons are an automatic drink dispenser, a soap and towels dispenser and finally an orchestra-machine that worked by using the force of water. It played music in parties while floating on water.';

const renaissanceHistorySpeak = 'There were quite a few robotic figures created during renaissance period between the years 1400 and 1799. 1738, a fully functional flute-playing robot had been created by Jacques de Vaucanson and put on show in Paris. In the 1770s, Swiss clockmaker Pierre Jacquet-Droz built a series of sophisticated robots. Leonardo da Vinci, one of the greatest geniuses ever, created the mechanical knight way back in 1495. According to historical sources, the mechanical knight was capable of human like movements.';

const asimovsLawsSpeak = 'first Law - A robot may not injure a human being or, through inaction, allow a human being to come to harm. Second Law - A robot must obey the orders given it by human beings except where such orders would conflict with the First Law. Third Law - A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws.';

const medicalUsesSpeak = 'Robots are very widely used in modern healthcare and medicine. They do surgery, they work companions to elderly people and they help in research. One of the most famous medical robots is the Da Vinci surgical system. It is made by the American company Intuitive Surgical – and helps real surgeons complete very complex surgeries.';

const carUsesSpeak = 'Robots have been used in car manufacturing for a long time. They were widely used in the 1970s. In modern car factories robots work with humnas and other robotst to various things like welding, painting and assembly. But most exciting new development is self driving cars. These cars are now very advanced and will become quite common soon. ';

const educationUsesSpeak = 'You may soon attend a class taught by a robot! There are exciting things happening in education with robot. Robots like those from Lego Mindstorms and Vex Robotics are used to get kids interested in science, technology engineering and math. Kasper – a robot from the UK helps teachers and parents support kids that find it difficult to communicate – and famous robots like nao and pepper from softback do a variety of work in edication.';

Submission

This skill will engage curious kids of all ages to a conversation about the history, some science fiction, some uses and other facts about Robots and Robotics.

The skill introduces kids to Robots and Robotics with some basic information.

The information is brief and introductory - our objective is to get kids interested in this fascinating subject and start learning more.

The information includes some ancient, medieval and modern history - science fiction - different uses of robots - and how they work.

Just say Alexa, Open Robotics for Kids to start a conversation. Or ask direct questions like

- 'Alexa, ask Robotics for Kids to talk about Asimov's laws.' etc.

robots, robotics, kids, education, learning, intelligence, intelligent, science, fiction, sci, fi, Asimov, STEM, history, CPU, artificial, intelligence, AI, technology, science, engineering, math

Alexa, start Robotics for Kids

Alexa, ask Robotics for Kids about Science Fiction

Alexa, ask Robotics for kids about History