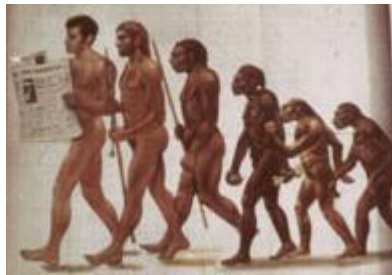


# Welcome

The **Science and Engineering Society** (SES) is a society, which is created for people who care about themselves and the planet they live in. The goal is to improve human quality of life and to advance in science and technology.

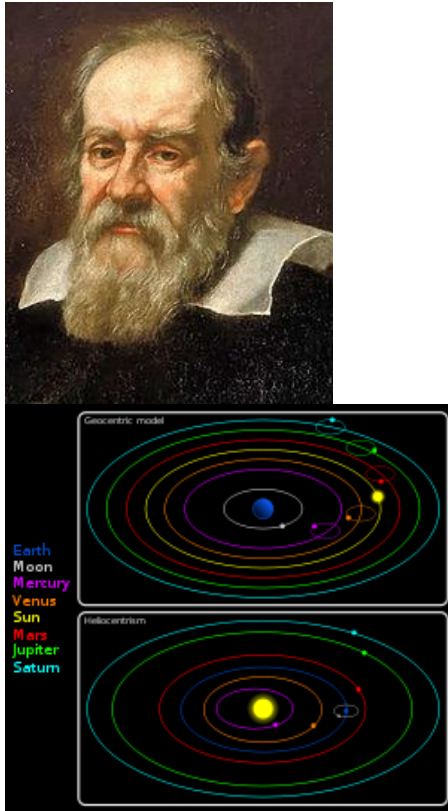
As we look back in time, our ancestors, the prehistoric humans had already tried and engaged in improving the quality of life since the dawn of man.

From fossil remains we learn how prehistoric humans made stone tools. Because of their progress and their advancement in making stone tools enabled us to make much better tools.



Along the human evolutionary road, many different groups of human beings were spread out from Africa to different continents of the Earth, mostly driven by the wax and wane of the long ice ages, and when they were subject to different environmental conditions, such as local weather conditions, food, and various geographical conditions, different cultures evolved in their unique setting. We can see clearly that those people who live in the mid-latitude of the Earth are more productive and intelligent than those who live at the equator. The most comfortable temperature for a human being is between 18 to 25 degrees Celsius. Temperature definitely has a great impact on our daily lives.

Caucasians, such as the Greeks had started with scientific thinking since 2500 years ago. However there was a period caused by the "Dark Age", scientific progress was delayed until the renaissance of science. Then came Galileo (1564–1642), he was able to show the Church that not the Earth was at the center of the Universe, but instead the Earth and other planets are orbiting around the Sun (see illustration here below). His revolutionary thinking brings about a big change in scientific thinking.



In the 17th century AD [Galileo Galilei](#) opposed the [Roman Catholic Church](#) by his strong support for heliocentrism

The Chinese had invented fireworks during the Tang Dynasty (618 – 907), just to have fun with, then after about 500 years gunpowder was used by the Europeans in wars, such as the application in cannons, gunpowder weapons, explosives in mines, etc.

The Chinese invented their Chinese Language through nature. English language came from Latin and Greek. The Greek, Latin, Hebrew, Arabic, Indian and other languages are all interesting languages, the way they come into existence suggest that how groups of people interact in their unique setting, and how the environment plays a role in the evolution of their languages.

In the 1950's and 1960's the government of the People's Republic of China were recreating the Chinese language by removing the amount of strokes in the traditional Chinese Characters, which is now the simplified version of the Chinese language. By doing so it makes life

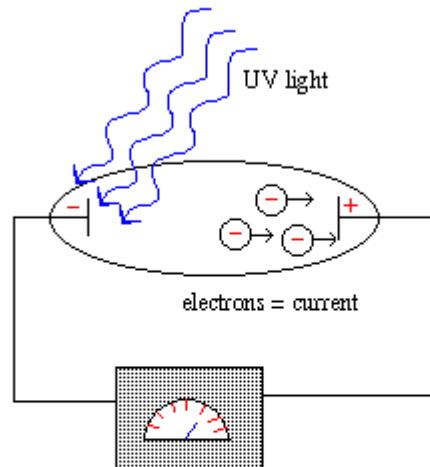
easier and of course it enhances literacy among Chinese.

The English language is now the most common language as a second language among many nations in the world. It has also gone through changes from Old English to Modern English. Here we can see that even languages are going through evolution.

In the past 200 years science and technology has been accelerated in an unprecedented pace.

Newton's Laws describe how objects move. Then Einstein came up with his Special Theory of Relativity. He described the increase of inertia with speed of an object, and the clock of that object also slows down with increasing speed. Einstein also contributed to "photo electric effect" (see illustration here below) and many others.

### Photoelectric Effect



**photon = wave particle of light**

Michael Faraday and Joseph Henry had discovered how electricity and magnetism worked in the early 1830s. Then electric motor was invented. It greatly improved our human existence through its application in household appliances (such as wash machines, dryers), trains, fans, music and video recorders etc..

In 1880, Thomas Edison invented an electric lamp, it profoundly change the way we live, it illuminate the night and making it hospitable to a wide range of human activities.

Tesla presented the fundamentals of radio in 1893. Before 1960, most radio electronic components consist of vacuum tubes, which were replaced by transistors. Then in 1960, the Sony Company introduced its first transistorized radio.

Television sets became available in the late 1930's, while color TV was available in the 1960's, and they evolve quite rapidly. In fact, color television sets with cathode ray tubes no longer sold in the electronics stores. In 2010, there is only flat plasma, LCD and LED television sets available in the stores (see illustration here below).



In the meantime steam engine, train, car, airplane, and many other things were also invented. All these technological breakthroughs are tremendous helpful to us, to improve our quality of lives.



Now we also have powerful and fast computers and satellites to help us to predict weather forecast and to guide us with our daily lives, and also helping farmers to plant their crops. In a hospital we will find many kinds of medical equipment, such as X-rays machine, Magnetic Resonance Imaging, Positron Emission Tomography (PET), and many more. All these equipments are to help us to improve the quality of life as well.

Apollo 11 was launched at 20 July 1969. It was tremendously valuable to mankind, and it shows that Americans were able to put human beings on the moon. But disappointingly the government of USA has terminated the moon landing program indefinitely. It seems like that mankind is going through some kind of "Modern Dark Age".

When we humans realize that we are brothers and sisters, and we are from a common ancestor of Africa, and if we have one common goal, then we will be able to overcome the "Modern Dark Age".

Then the question is how science and technology will help us and change us, and contribute to human evolution?

