Galileo son of vincenzo galilei, a member

Galileo GalileiGalileo Galilei is considered to be one of the greatest mathematicians of all time.

He made life changing discoveries and mystified many with his knowledge. However, not all of his work was accepted well. Galileo challenged the church creating a controversy that will never be forgotten.

Galileo Galilei was born in Pisa, Italy February 18, 1564. He was the son of Vincenzo Galilei, a member of a Noble family, a musician and a mathematician. Galileo, at an early age, developed a great love for mathematics and mechanics. However, his parents urged him to seek medical professions which promised more fortune. Galileo's love for mathematics turned him away from his parents wishes only to follow his natural talents. Before reaching the age of twenty, Galileo made a great observation of mechanics. He observed a swinging lamp in the cathedral of Pisa which led to his theory of the pendulum and fifty years later led to the construction of an astronomical clock.

In 1588, he was given the title of the Archimedes of his time. He also received a position of lectureship at the University of Pisa. With this position, he began his research on free-fall and eventually proved that all objects in a vacuum would fall at the same rate of speed. This observation was contradictory to the previous beliefs that the rate of fall of an object was proportional to the object's mass. The Aristotelians refuted his findings, however, and remained faithful to their master's discoveries. By the influence of his friends, he received a position as the chair of mathematics at the University of Pisa. He remained there for eighteen years before returning

to the original home of his family in Florence. There he was appointed mathematician and philosopher by the Grand Duke of Tuscany.

His continued his work with the investigation of nature and followed by experimenting with inclined planes. His laws of free-fall were then established and have remained the same ever since. He also wrote the laws of projectiles and formulated what would eventually become Newton’s laws. Not only that, but Galileo also discovered the principles of flotation and invented a thermoscope. However, the thermoscope was defective. Galileo’s discoveries of astronomy, for which he is mostly known, resulted from his invention of the telescope. He considered the laws of refraction, he built a telescope that made it possible to see objects at three times their size. Within one night he improved it to be able to see objects to thirty-two times their size.

As a result of these discoveries, he began his research of the heavens. His first discovery showed that the moon was not a smooth sphere as was commonly believed, but contained hills and valleys much like the earth. He also discovered the satellites of Jupiter which displayed characteristics much like those of our own solar system.

However, in contradiction to popular Copernican belief that Mercury and Venus were transparent and did not block the sun’s rays, Galileo found that they, too, were much like our own planet with phases like the moon. Finally, he also discovered sunspots. Galileo’s support of Copernican theory as truth raised much controversy with ecclesiastical authorities. “ The direct services which Galileo rendered to astronomy are virtually summed up in his

telescopic discoveries, which, brilliant as they were, contributed little or nothing in the theoretical perfection of the science, and were sure to be made by any carefull observer provided with a telescope.” 1 Some even believed that it would have been in Galileo’s best interest to refrain from publishing his discoveries since they merely lead to Newton’s laws. However, some men were not convinced by Galileo’s hypothesis. Galileo also attempted to explain the movement of the tides but was incorrect in his theories.

Newton later reformed those laws explaining that their motion is directly influenced by the gravitational pull of the moon. Galileo believed very strongly in his theories which later resulted in his imprisonment. It is still believed today that a grave error was committed on the part of the ecclesiastical authorities because of their hatred for science and the desire to remain unenlightened concerning the heavens. However, Galileo protested saying that the Bible’s purpose is to “ tell men to go to heaven, not how the heavens go.” 2 He did, nonetheless, predict his own ridicule but did not anticipate prosecution. Galileo was not received poorly, however, despite how controversial his work was. In 1611 he went to Rome to set up his telescope in the Quirinal Garden belonging to Cardinal Bandim. All gathered to see the well renowned, brilliant man.

Four years later, the authorities began to take notice of Galileo’s persistence in teaching Copernican hypothesis as truth. They began to believe that his findings were completely false and unscientific and were supported by no proof. They also became concerned with the decay of credit of the Holy Scripture. In attempt to resolve this conflict, Galileo and his ally, Foscarini

looked for support of Galileo’s beliefs within the seven-branched candlestick of the Old Law.

Not too long after, a party was formed to overthrow religion which surely supported Galileo’s theories. Galileo went to Rome after hearing rumors that his work was proclaimed anti-Scriptural. Upon his arrival, Galileo was directed to declare that his work was scientifically false, and anti-Scriptural and heretical, and he must renounce it. The Inquisition declared that Galileo was denounced ...

for holding as true a false doctrine taught by many, namely, that the sun is immovable in the center of the world, and that the earth moves, and also with a diurnal motion; also, for maintaining a correspondence on the same with some German mathematicians; also for publishing certain letters on the sunspots, in which you developed the same doctrine as true; also, for answering the objections which were continually produced from the Holy Scriptures, by glozing the said Scriptures according to your own meaning; and whereas thereupon was produced the copy of a writing, in form of a letter professedly written by you to a person formerly your pupil, in which, following the hypothesis of Copernicus, you include several propositions contrary to the true sense and authority of the Holy Scriptures...3 However, the authorities made a horrible mistake.

No objection was made at the time concerning the teaching of Copernican hypothesis as a hypothesis, however, declaring it as fact was forbidden because it appeared to contradict Holy Scripture. Galileo then returned to Florence to begin work on a dialogue, despite his vow to refrain from

committing such acts, which aggravated the authorities. They saw his action as a challenge and condemned him as “ vehemently suspected of heresy” 4. He was then imprisoned and directed to recite the Seven Penitential Psalms once a week for three years. He remained “ imprisoned,” staying at luxurious homes of his friends or handsome apartments of the Inquisition for twenty-two years until his death. Many rumors were told that he was tortured and could not be buried in consecrated ground. However, he did go completely blind, not from torture of course, and was buried in consecrated ground, but was not allowed a monument.

Galileo created a great controversy between the scientific community and the men of the cloth. They felt that without direct correlation to the Scriptures, any scientific work was against religion. Many people today declare that the Bible says that something was done and science merely tells exactly how. For example, in the Bible it says that God created the earth. Science merely attempts to decipher how it was done.

Today, the truth about Galileo’s studies has received proper recognition, and it is understood that science is a reflection of reason, and reason a reflection of science.