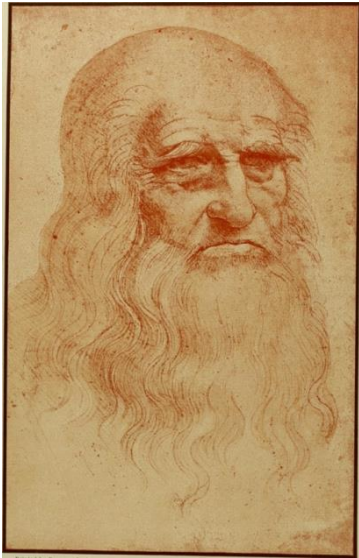


LEONARDO DA VINCI



Leonardo di Ser Piero Da Vinci was born on April 15, 1452 in Anchignano. He was an inventor, an artist and a scientist. A man of genius and universal talent of the Renaissance, he is considered one of the greatest geniuses of humanity.

He fully represents the spirit of his age, bringing it to the greatest forms of expression in many fields of art and knowledge. He was, in fact, a scientist, a philosopher, an architect, a painter, a sculptor, a draftsman, an anatomist, a musician, an engineer and a designer.

Among his most important works we find the Mona Lisa, the Last Supper, the Vitruvian man, Salvator Mundi, The Woman with the Ermine, St. John the Baptist and many others.

Many of the technologies we have today and which we make good use of in various daily activities, we probably owe them to the genius of Leonardo Da Vinci, who anticipated them 500 years ago.

Among his most important scientific discoveries we remember the flying machines, of which he never saw a real application, but it certainly influenced modern studies. He invented the propeller and the parachute in 1489. He was an inventor of the tank and a spring and spiral trabiccolo in which someone saw an anticipation of the car.

Even in **astronomy** Leonardo da Vinci gave a fundamental contribution to the setting of this scientific discipline, with some brilliant insights.

In Leonardo's writings, we find evidence of his ability to explain and express great complex concepts in a clear and very simple way.

“El Sol doesn't move”: The dimension and centrality of the Sun in Leonardo Da Vinci's Heliocentric Theory.

Leonardo's writings on astronomy cover a deep cultural importance because they are fully inserted into Renaissance science and philosophy.

He theorized the centrality of the Sun, to which he dedicates a large study, certainly attracted by both cosmological implications concerning its apparent motion and the mysterious origin of its heat.

Leonardo also compared the planets to magnets that attract each other, succeeding with a few easy words to describe the concept of universal gravitation, even if at that time it was far from the laws of gravitation that Kepler and Newton later formulated.

First, Leonardo thinks that the Sun is certainly much larger than the Earth and he comes to this conclusion after he had projected onto a wall in a dark room a bright disc. In manuscript A, folio 20v, he gives instructions for performing the measurements "How to know how big the Sun is".

On the subject of gravity, Leonardo managed to illustrate an image of rare suggestion, which he used it to explain the impossibility of perpetual motion, imagining making a hole through the Earth from side to side passing through the center, as he himself writes extremely clear:

“No insensitive thing will move by itself, so that, moving, it is moved by unequal weight; and when the desire for the first motor ceases, the second will immediately cease”.

Leonardo's hypothesis tells us that if we throw a stone into the hole he theorized, it would pass the center of the Earth, continuing its path until it reaches the opposite side to ours. Then it would go back and, after passing through the center of the Earth again, it would come out of the hole where we threw it. This commuter motion would continue for a long time gradually reducing its extension, until the stone stops in the center of the

Land. The hypothetical experiment, therefore, would confirm the idea of the impossibility of perpetual motion theorized by Leonardo, but does not

take into account the reason for the slowdown of the motion of the stone, that is the aerodynamic drag generated by the air.

In fact, we know that, by simplifying the most, if the space in which the stone travels was completely empty, i.e. in the absence of air, the force that resists the motion of the stone would be missing and we would have a theoretical model of motion perpetual, that is precisely the option that Leonardo intended to deny.

Leonardo Da
1519 in Amboise.

Vinci died on May 2,

