

**“Iron rusts from disuse; stagnant water
loses its purity and in cold weather becomes frozen;
even so does inaction sap the vigor of the mind.”**

Leonardo Da Vinci

Leonardo was born on April 15, 1452, in Vinci, Italy, just outside Florence.

Growing up in his father's Vinci home, Leonardo had access to books and paintings owned by family and friends. He was also exposed to Vinci's longstanding painting tradition, and when he was about 15 his father apprenticed him to the renowned workshop of Andrea del Verrochio in Florence. Even as an apprentice, Leonardo demonstrated his talent. Leonardo stayed in the Verrocchio workshop until 1477.

In search of new challenges and the big bucks, he entered the service of the Duke of Milan. He spent 17 years in Milan. It was during these years that Leonardo hit his stride, reaching new heights of scientific and artistic achievement.

The Duke kept Leonardo busy painting and sculpting and designing elaborate court festivals, but he also put Leonardo to work designing weapons, buildings and machinery. From 1485 to 1490, Leonardo made drawings on lots of subjects, including nature, flying machines, geometry, mechanics, municipal construction, canals and architecture (designing everything from churches to fortresses).

Unfortunately Leonardo's interests were so broad, and he was so often compelled by new subjects, that he usually failed to finish what he started. This lack of "stick-to-it-ness" resulted in his completing only about six works in these 17 years, including "The Last Supper". And he left dozens of paintings and projects unfinished. He spent most of his time studying science, either by going out into nature and observing things or by locking himself away in his workshop cutting up bodies. He was one of the greatest painters of the Italian Renaissance, yet he left only a handful of completed paintings. And he was a gentle vegetarian who loved animals and despised war, yet he worked as a military engineer to invent advanced and deadly weapons.

Between 1490 and 1495 he developed his habit of recording his studies in meticulously illustrated notebooks. His work covered four main themes: painting, architecture, the elements of mechanics, and human anatomy. These notebooks are very valuable today. Bill Gates recently paid \$30 million for one of them!

About 1503, Leonardo reportedly began work on the "Mona Lisa." Did you know it took him 6 years to paint the Mona Lisa? Light and shadow from our elements of composition is what is really important in this painting. The shadows around her eyes and mouth give her a very mysterious air. Is she smiling? Or is she pensive. Part of the charm of this painting lies in the unknown. The painting now hangs in the Louvre in Paris, positioned behind bullet proof glass and attracts hundreds of visitors daily from around the world.

Leonardo died on May 2, 1519 in Cloux, France. Legend has it that King Francis of France was at his side when he died, cradling Leonardo's head in his arms.

Leonardo da Vinci was much more than an artist. He was an astronomer, storyteller, sculptor, geologist, mathematician, botanist, animal behaviourist, inventor, engineer,

architect and even a musician.

Mirror Writing

Leonardo wrote in Italian using a special kind of handwriting that he invented himself. He usually used "mirror writing", starting at the right side of the page and moving to the left. He was left handed. No one knows the true reason Leonardo used mirror writing, though several possibilities have been suggested:

- He was trying to make it harder for people to read his notes and steal his ideas.
- He was hiding his scientific ideas from the powerful Roman Catholic Church, whose teachings sometimes disagreed with what Leonardo observed.
- Writing left handed from left to right for a left handed person was messy because the ink just put down would smear as his hand moved across it. Leonardo chose to write in reverse because it prevented smudging.

Fables

Leonardo also wrote fables. Fables are short stories that have a moral.

One of his fables about a cat is as follows:

One morning a little mouse could not leave his house. It was besieged.

A hungry weasel was waiting outside. Through a tiny breathing hole the mouse saw him intently watching the entrance, ready to spring,

The poor little mouse, knowing himself to be in terrible danger, trembled all over with fear.

But a cat suddenly leaped onto the weasel's back, seized him between his teeth and devoured him.

"Great Jupiter, I thank you" sighed the mouse, who had observed the scene through his spy hole, "and I shall willingly sacrifice some of my food to you."

And so he gave the cat some of his food. But in escaping one danger, he foolishly forgot the other. The cat, being a cat, ate him too.

Exercise

Show the children the drawings and ask them to guess what current day invention may have been inspired by his drawings. For the older ones ask them to draw something they would like to invent.