

Leonardo da Vinci



STUDENT

HANDOUTS

BIOGRAPHY WORKBOOK SERIES

LEONARDO DA VINCI
(1452-1519)

Leonardo da Vinci seems to present in his own person a résumé of all the characteristics of the Renaissance age in which he lived. He was the miracle of that age of miracles. Ardent and versatile as youth, patient and persevering as age, a most profound and original thinker, the greatest mathematician and most ingenious mechanic of his time, architect, chemist, engineer, musician, poet, painter—we are not only astounded by the variety of his natural gifts and acquired knowledge, but by the practical direction of his amazing powers.

1. ardent:

- a. lingering
- b. passionate
- c. uninterested
- d. weak

2. versatile:

- a. capable of easily moving from one task to another
- b. eager to make a positive impression
- c. inappropriate for discussion
- d. unwilling to make extreme sacrifices

3. According to popular opinion, Leonardo da Vinci does not seem to have had anything in common with the Renaissance age in which he lived.

- a. True
- b. False

The extracts which have been published in da Vinci's own handwriting show him to have anticipated, by the force of his own immense intellect, some of the greatest discoveries made since his time.

4. immense:

- a. extreme
- b. mediocre
- c. pungent
- d. vast

"These fragments are, according to our common estimate of the age in which he lived, more like revelations of physical truths vouchsafed to a single mind than the superstructure of its reasoning upon any established basis," says the historian, Mr. Hallam. "The discoveries which made Galileo, Kepler, Castelli, and other names

illustrious; the system of Copernicus, the very theories of recent geologists, are anticipated by Da Vinci within the compass of a few pages, not perhaps in the most precise language, or on the most conclusive reasoning, but so as to strike us with something like the awe of preternatural knowledge.

5. revelations:

- a. disclosures
- b. dreams
- c. fixed ideas
- d. secrets

6. superstructure

- a. large cathedral style popular during the Renaissance
- b. part of a building above the foundation
- c. skyscraper
- d. Walmart superstore

7. anticipated:

- a. hoped for
- b. idealized
- c. realized beforehand
- d. unrecognized

8. preternatural:

- a. abnormal
- b. de rigueur
- c. regular
- d. terrible

"In an age of so much dogmatism he first laid down the grand principle of Bacon, that experiment and observation must be the guides to just theory in the investigation of nature. If any doubt could be harbored, not as to the right of Leonardo da Vinci to stand as the first name of the fifteenth century, which is beyond all doubt, but as to his originality in so many discoveries, which probably no one man, especially in such circumstances, has ever made, it must be by an hypothesis not very untenable, that some parts of physical science had already attained a height which mere books do not record."

9. dogmatism:

- a. arrogant positivism of opinions as truths
- b. enthusiasm
- c. love of canine creatures
- d. pedantry

10. hypothesis:

- a. logical proposition that explains a phenomenon
- b. opinion about what caused something to be
- c. opposite of something else in meaning or intent
- d. sensitivity to extremes of hot and cold

- 11. untenable:
 - a. absolutely right
 - b. indefensible
 - c. innumerable
 - d. uncontrollable

It seems at first sight almost incomprehensible that, thus endowed as a philosopher, mechanic, inventor, and discoverer, the fame of Leonardo should now rest on the works he has left as a painter. We cannot, within these limits, attempt to explain why and how it is that as the man of science he has been naturally and necessarily left behind by the onward march of intellectual progress, while as the poet-painter he still survives as a presence and a power. We must proceed at once to give some account of him in the character in which he exists to us and for us—that of the great artist.

- 12. incomprehensible:
 - a. arrogant
 - b. erudite
 - c. freakish
 - d. unintelligible

- 13. intellectual:
 - a. appealing to sentiment
 - b. appealing to the intellect
 - c. sophomoric
 - d. tenacious

- 14. Why have so many of Leonardo's achievements been largely forgotten?

Leonardo was born at Vinci, near Florence, in the Lower Val d'Arno, on the borders of the territory of Pistoia. His father, Piero da Vinci, was an advocate of Florence—not rich, but in independent circumstances, and possessed of estates in land. The singular talents of his son induced Piero to give Leonardo, from an early age, the advantage of the best instructors.

- 15. Who was Leonardo's father?

- 16. singular:
 - a. extraordinary
 - b. lonely
 - c. mediocre
 - d. unmarried

As a child, Leonardo distinguished himself by his proficiency in arithmetic and mathematics. Music he studied early, as a science as well as an art. He invented a species of lyre for himself, and sung his own poetical compositions to his own music, both being frequently extemporaneous. But his favorite pursuit was the art of design in all its branches. Leonardo modeled in clay or wax, or attempted to draw every object which struck his fancy.

17. Leonardo invented a type of what musical instrument?

- 18. extemporaneous:
- a. adorned
- b. extra
- c. feasible
- d. impromptu

Leonardo's father sent him to study under Andrea Verrocchio, famous as a sculptor, chaser in metal, and painter. Andrea, who was an excellent and correct designer, but a bad and hard colorist, was soon after engaged to paint a picture of the baptism of Jesus. He employed

Leonardo, then a youth, to execute one of the angels. This Leonardo did with so much softness and richness of color, that it far surpassed the rest of the picture. Verrocchio from that time threw away his palette, and confined himself wholly to his works in sculpture and design, "enraged," says Vessari, "that a child should thus excel him."

19. Leonardo's father sent him to study art under whom?

- 20. surpassed:
- a. articulated
- b. dismantled
- c. exceeded
- d. revoked

The youth of Leonardo thus passed away in the pursuit of science and of art. Sometimes he was deeply engaged in astronomical calculations and investigations. Sometimes he was ardent in the study of natural history, botany, and anatomy. Sometimes he was intent on new effects of color, light, shadow, or expression in representing objects animate or inanimate. Versatile, yet persevering, he varied his pursuits, but he never abandoned any.

- 21. animate:
 - a. alive
 - b. dead
 - c. supernatural
 - d. wounded

Leonardo was quite a young man when he conceived and demonstrated the practicability of two magnificent projects. One was to lift the whole of the church of San Giovanni, by means of immense levers, some feet higher than it now stands, and thus supply the deficient elevation. The other project was to form the Arno into a navigable canal as far as Pisa, which would have added greatly to the commercial advantages of Florence.

- 22. What church did Leonardo lift several feet higher?

- 23. navigable:
 - a. able to be avoided but at great cost
 - b. better than the original format
 - c. capable of providing passage for ships
 - d. native to a particular region of a country

- 24. Based on your knowledge of the Italian economy during the Renaissance, why were navigable waterways important to Italian traders and merchants?

It happened about this time that a peasant on the estate of Piero da Vinci brought him a circular piece of wood, cut horizontally from the trunk of a very large old fig-tree, which had been lately felled, and begged to have something painted on it as an ornament for his cottage. The man being an especial favorite, Piero desired his son Leonardo to gratify his request. Leonardo, inspired by that wildness of fancy which was one of his characteristics, took the panel into his own room, and resolved to astonish his father by a most unlooked-for proof of his art.

Leonardo determined to compose something which should have an effect similar to that of the Medusa on the shield of Perseus, and almost petrify beholders. Aided by his recent studies in natural history, he collected together from the neighboring swamps and the river mud all kinds of hideous reptiles, as adders, lizards, toads, serpents, and insects, as moths, locusts, and other crawling and flying obscene and obnoxious things. Out of these, he composed a sort of monster or chimera, which he represented as about to issue from the shield, with eyes flashing fire, and of an aspect so fearful and abominable that it seemed to infect the very air around.

When finished, Leonardo led his father into the room in which it was placed, and the terror and horror of Piero proved the success of his attempt. This production, afterward known as the *Rotello del Fico*, from the material on which it was painted, was sold by Piero secretly for one hundred ducats to a merchant, who carried it to Milan, and sold it to the duke for three hundred. To the poor peasant, thus cheated of his *Rotello*, Piero gave a wooden shield, on which was painted a heart transfixed by a dart, a device better suited to his taste and comprehension. In the subsequent troubles of Milan,

Leonardo's picture disappeared, and was probably destroyed as an object of horror by those who did not understand its value as a work of art.

25. Create your own *Rotello del Fico*—a shield full of a strange (and perhaps gruesome) object or figure that appears to burst forth. You may print a blank coat-of-arms/shield worksheet here: [http://www.studenthandouts.com/01-Web-Pages/New%20Folder%20\(2\)/Coat-of-Arms.html](http://www.studenthandouts.com/01-Web-Pages/New%20Folder%20(2)/Coat-of-Arms.html)

26. Imagine that you are Leonardo, and have painstakingly created a significant piece of art which is to be given as a gift by your father. Instead, your father sells this piece of art, and gives as a gift a cheaper item. How might you react? What does this difference in thinking say about the fundamental personality differences between Leonardo and his father?

representing the deformed and the terrible.

27. **eccentricity:**
 a. **accent**
 b. **essential part**
 c. **jargon**
 d. **peculiarity**
28. **caricatures:**
 a. **crude drawings**
 b. **menacing creatures**
 c. **ludicrously** **exaggerative pictures**
 d. **ominously** **foreboding warnings**

During this first period of his life, which was wholly passed in Florence and its neighborhood, Leonardo painted several other pictures of a very different character. He designed some beautiful cartoons of sacred and mythological subjects, which showed that his sense of the beautiful, the elevated, and the graceful was not less a part of his mind than that eccentricity and almost perversion of fancy which made him delight in sketching ugly, exaggerated caricatures, and

Leonardo da Vinci was now about thirty years old, in the prime of his life and talents. His taste for pleasure and expense was, however, equal to his genius and indefatigable industry. Anxious to secure a certain provision for the future, as well as a wider field for the exercise of his various talents, he accepted the invitation of Ludovico Sforza il Moro, then regent, afterward Duke of Milan, to reside in his court, and to execute a colossal equestrian statue of his ancestor, Francesco Sforza. Here begins the second period of Leonardo’s artistic career, which includes his sojourn at Milan, that is, from 1483 to 1499.

- 29. **indefatigable:**
 - a. **disinterested**
 - b. **mystifying**
 - c. **undefeatable**
 - d. **untiring**

30. **Ludovico Sforza il Moro commissioned Leonardo to execute an equestrian statue of whom?**

- 31. **Leonardo spent the years 1483-1499 in ____.**
 - a. **Florence**
 - b. **Milan**
 - c. **Paris**
 - d. **Rome**

The writer Vasari says that Leonardo was invited to the court of Milan for the Duke Ludovico's amusement, "as a musician and performer on the lyre, and as the greatest singer and improvvisatore of his time." But this is improbable. Leonardo, in his long letter to that prince, in which he recites his own qualifications for employment, dwells chiefly on his skill in engineering and fortification. He sums up his pretensions as an artist in these few

brief words: "I understand the different modes of sculpture in marble, bronze, and terra-cotta. In painting, also, I may esteem myself equal to anyone, let him be who he may."

- 32. **improvvisatore:**
 - a. **entrepreneur**
 - b. **equestrian**
 - c. **master painter**
 - d. **person who improvises verse**

Of his musical talents, Leonardo makes no mention whatever. Though undoubtedly these, as well as Leonardo's other social accomplishments, his handsome person, his winning address, his wit and eloquence, recommended him to the notice of the prince, by whom he was greatly beloved, and in whose service he remained for about seventeen years.

It is not necessary, nor would it be possible here, to give a particular account of all the works in which Leonardo was engaged for his patron, nor of the great political events in which he was involved, more by his position than by his inclination. For instance, the invasion of Italy by Charles VIII of France, and the subsequent invasion of Milan by Louis XII, which ended in the destruction of Duke Ludovico.

33. Monarchs from what European country invaded Italy, and eventually reached Milan?

- a. England
- b. France
- c. Germany
- d. Spain

The greatest work of all, and by far the grandest picture which, up to that time, had been executed in Italy, was the *Last Supper*, painted on the wall of the refectory, or dining room, of the Dominican convent of the Madonna delle Grazie. It occupied Leonardo about two years, from 1496 to 1498.

34. Leonardo spent approximately how many years painting the *Last Supper*?

- a. 1
- b. 2
- c. 3
- d. 4

The moment selected by the painter is described in the 26th chapter of the Gospel of St. Matthew of the Christian New Testament, 21st and 22nd verses: "And as they did eat, he said, Verily, I say unto you, that one of you shall betray me: and they were exceeding sorrowful, and began every one of them to say unto him, Lord, is it

I?" The knowledge of character displayed in the heads of the different apostles is even more wonderful than the skilful arrangement of the figures and the amazing beauty of the workmanship. The space occupied by the picture is a wall twenty-eight feet in length and the figures are larger than life.

35. The figures in the *Last Supper* are life-sized.

- a. True
- b. False

Of this magnificent creation of art, only the moldering remains are now visible. It has been so often repaired that almost every vestige of the original painting is annihilated. But from the multiplicity of descriptions, engravings, and copies that exist, no picture is more universally known and celebrated.

Perhaps the best judgment we can now form of its merits is from the fine copy executed by one of Leonardo's best pupils, Marco Uggione, for the Certosa at Pavia, and now in London, in the collection of the Royal Academy. Eleven other copies, by various pupils of Leonardo, painted either during his lifetime or within a few years after his death, while the picture was in perfect preservation,

exist in different churches and collections.

36. The best contemporaneous (made at around the same time) copy of the *Last Supper* was done by _____.

- a. Francesco Sforza
- b. Ludovico Sforza il Moro
- c. Marco Uggione
- d. Michelangelo

While engaged on the Cenacolo, Leonardo painted the portrait of Lucrezia Crivelli, now in the Louvre (No. 483). It has been engraved under the title of *La Belle Ferronnière*, but later researches leave us no doubt that it represents Lucrezia Crivelli, a beautiful favorite of Ludovico Sforza, and was painted at Milan in 1497. It

is, as a work of art, of such extraordinary perfection that all critical admiration is lost in wonder.

37. Leonardo's portrait of Lucrezia Crivelli is known by what title?

Of the grand equestrian statue of Francesco Sforza, Leonardo never finished more than the model in clay, which was considered a masterpiece. Some years afterward (in 1499), when Milan was invaded by the French, it was used as a target by the Gascon bowmen, and completely destroyed. The profound anatomical studies which Leonardo made for this work still exist.



Raphael Introduced to Da Vinci

In the year 1500, the French being in possession of Milan, his patron Ludovico in captivity, and the affairs of the state in utter confusion, Leonardo returned to his native Florence. Here Leonardo hoped to reestablish his broken fortunes, and to find employment. In Florence begins the third period of his artistic life, from 1500 to 1513, that is, from his forty-eighth to his sixtieth year.

- 38. Leonardo spent the years 1500-1513 in _____.
 - a. Florence
 - b. Milan
 - c. Paris
 - d. Rome

Leonardo found the Medici family in exile, but was received by Pietro Soderini (who governed the city as "Gonfalonière perpetuo") with great distinction. A pension was assigned to Leonardo as painter in the service of the republic. One of his first works after his return to Florence was the famous portrait of Madonna Lisa del Giocondo, called in French *La Joconde* and known to English speakers as *Mona Lisa*, and now in the Louvre. After the death of Leonardo, it was purchased by Francis I for 4,000 gold crowns, an enormous sum in those

days. Yet who ever thought it too much?

- 39. Leonardo's portrait of Madonna Lisa del Giocondo is known by what title to English speakers?

Then began the rivalry between Leonardo and Michelangelo, which lasted during the remainder of Leonardo's life. The difference of age (for Michelangelo was twenty-two years younger) ought to have prevented all unseemly jealousy. But Michelangelo was haughty and impatient of all superiority, or even equality. Leonardo was sensitive, capricious, and naturally disinclined to admit the pretensions of a rival, to whom he could say, and did say, "I was famous before you were born!" With all their admiration of each other's genius, their mutual frailties prevented any real goodwill on either side.

- 40. Michelangelo and Leonardo are considered to be two of the greatest artists of all time, and were, according to some art historians, competitive with one another. Do

you believe that competition is a good thing or a bad thing? Explain your answer.

Horizontal lines for writing an answer to the question about competition.

Leonardo, during his stay at Florence, painted the portrait of Ginevra Benci, the reigning beauty of her time. We find that in 1502 he was engaged by Cæsar Borgia to visit and report on the fortifications of his territories, and in this office he was

employed for two years. In 1503, Leonardo formed a plan for turning the course of the Arno. In the following year, he lost his father. In 1505, he modeled the group which we now see over the northern door of the San Giovanni, at Florence. In 1514 he was invited to Rome by Pope Leo X, but more in his character of philosopher, mechanic, and alchemist, than as a painter.

- 41. When did Leonardo's father die?
a. 1502
b. 1503
c. 1504
d. 1505

- 42. Who invited Leonardo to Rome in 1514?

Horizontal lines for writing an answer to question 42.

In Rome, Raphael was at the height of his fame, and engaged in his greatest works, the frescoes of the Vatican. The younger artist was introduced to the elder. Two pictures which Leonardo painted while at Rome—the Madonna of St. Onofrio and the Holy Family, painted for Filiberta of Savoy, the pope's sister-in-law (which is now at St. Petersburg)—show that even this veteran in art felt

the irresistible influence of the genius of his young rival. They are both Raphaelesque in the subject and treatment.

43. What younger artist influenced Leonardo in Rome?

It appears that Leonardo was ill-satisfied with his sojourn in Rome. He had long been accustomed to hold the first rank as an artist wherever he resided. In Rome, he found himself only one among many whom, if they acknowledged his greatness, affected to consider his day as past. He was conscious that many of the improvements in the arts which were now brought into use, and which enabled the painters of the day to produce such extraordinary effects, were invented or introduced by himself.

If he could no longer assert that measureless superiority over all others which he had done in his younger days, it was because he himself had opened to them new paths to excellence. The arrival of Leonardo's old competitor, Michelangelo, and some slight on the part of Leo X, who was annoyed by his speculative and

dilatory habits in executing the works entrusted to him, all added to Leonardo's irritation and disgust.

Leonardo left Rome, and set out for Pavia, where the French king, Francis I, then held his court. He was received by the young monarch with every mark of respect, loaded with favors, and a pension of 700 gold crowns settled on him for life.

44. At this time, France's Francis I held court in what northern Italian city?

- a. Florence
- b. Genoa
- c. Milan
- d. Pavia

At the famous conference between Francis I and Leo X at Bologna, Leonardo attended his new patron, and was of essential service to him on that occasion. In the following year, 1516, he returned with Francis I to France, and was attached to the French court as principal painter. It appears, however, that during his residence in France, he did not paint a single picture. His health had begun to decline from the time he left Italy.

Feeling his end approach, Leonardo prepared himself for it by religious meditation, by acts of charity, and by a most conscientious

distribution by will of all his worldly possessions to his relatives and friends. At length, after protracted suffering, this great and most extraordinary man died at Cloux, near Amboise, on May 2, 1519, being then in his sixty-seventh year. It is to be regretted that we cannot wholly credit the beautiful story of his dying in the arms of Francis I, who, as it is said, had come to visit him on his deathbed. It would indeed have been, as Fuseli expressed it, "an honor to the king, by which destiny would have atoned to that monarch for his future disaster at Pavia."

Renaissance person? Do you believe that you are growing to become a Renaissance person? Explain your answer.

Horizontal lines for writing answers to the Renaissance person question.

45. Where did Leonardo die?

Horizontal lines for writing the answer to question 45.

46. Leonardo da Vinci is considered to be the finest example of a Renaissance person. He was deeply interested in learning, and mastered everything from engineering, to painting, to science. When a person is today described as a "Renaissance man" or "Renaissance woman," the term means that this person has a wide range of interests at which he or she excels. Can you think of anyone living today who is a

Map Work



Use the map at the top of the page as a guide. Answer the following questions. Use the map below for writing, coloring, and drawing.

- 47. Label Florence on the map below.
- 48. What is the approximate distance between Rome and Florence?
 - a. 90 miles
 - b. 140 miles
 - c. 190 miles
 - d. 240 miles



- 49. Label Milan on the map below.
- 50. Label Rome on the map below.
- 51. Which of the following cities is not located on the Italian peninsula?
 - a. Bologna
 - b. Genoa
 - c. Palermo
 - d. Ravenna
- 52. Color Sardinia blue.
- 53. Color Sicily pink.
- 54. Place a star on the place where Leonardo da Vinci was born.

Word Search Puzzle



artist
engineer
Florence
Leonardo
Michelangelo
Milan
Mona Lisa

painting
Raphael
Renaissance
Rome
scope
talent
vast