LEONARDO LIVES ON!

Grade Level: 5th Grade
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Length of Unit: 10 lessons

I. ABSTRACT
This is a fifth grade unit on the ideals and values of the Renaissance as they are embodied in the visual arts of the time, and in the life and genius of Leonardo da Vinci. Students will explore some of the art and artists of the Renaissance, including Michelangelo, Raphael, da Vinci, Brunelleschi, and others. In addition, students will apply principles of da Vinci's genius to develop a personal journal that exemplifies how the ideals of the Renaissance live on today in each of us. Writing, drawing, listening, and personal reflections will be the impetus for making connections between this influential period in history and the world today. This unit is meant to complement a study of the history of the Renaissance.

II. OVERVIEW
A. Concept Objective:
1. Students will recognize how the ideas of the Renaissance live on today.
2. Students will understand how a culture's social and political development are reflected in its art.
3. Students will learn to recognize and appreciate great works of art.
B. Content from the Core Knowledge Sequence
1. The shift in world view from medieval to Renaissance art: a new emphasis on humanity and the natural world
2. The influence of Greek and Roman artists on Renaissance artists.
3. The development of linear perspective during the Italian Renaissance.
4. Observe and discuss works in different genres--such as portrait, fresco, Madonna--by Italian Renaissance artists.
5. Leonardo da Vinci
6. Michelangelo
7. Patrons of the arts and learning
8. Renaissance ideals and values, such as the "Renaissance Man"
9. Become familiar with Renaissance sculpture and architecture
10. Figurative language
C. Skill Objectives:
1. The student connects his/her own experiences, information, insights, and ideas with the experiences of others through speaking and listening. LA TEKS 5.4A
2. The student interprets text ideas through such varied means as journal writing, discussion, enactment, and media. LA TEKS 5.11B
3. The student reads to increase knowledge of his/her own culture, the culture of others, and the common elements of cultures. LA TEKS 5.14
4. The student articulates themes and connections that cross cultures. LA TEKS 5.14C
5. The student writes to express, record, develop, reflect on ideas, and to problem solve. LA TEKS 5.15A
6. The student uses literary devices effectively, such as...figurative language. LA TEKS 5.15G
7. The student understands and interprets visual messages. LA TEKS 5.23
8. The student analyzes and critiques the significance of visual messages, images, and meanings. LA TEKS 5.24
9. The student selects, organizes, and produces visuals to complement and extend meanings. LA TEKS 5.25

III. BACKGROUND KNOWLEDGE
A. For Teachers:

B. For Students:
   1. Europe in the Middle Ages, Grade 4
   2. Visual Arts in the Middle Ages in Europe, Grade 4
   3. Elements of Art, Grade 3

IV. RESOURCES
A. Gelb, Michael. *How To Think Like Leonardo da Vinci*.
B. Prum, Deborah. *Rats, Bulls, and Flying Machines*.
D. Venezia, Mike. *Michelangelo; Da Vinci*
E. Recording of Beethoven's 5th Symphony (Disney's Fantasia 2000 recommended)
G. Bare books: one per student (from Treetop Publishing)
H. *Renaissance Thematic Unit* by Teacher Created Materials.
I. Power Point Presentation: End of Unit Quiz (Appendix N)

V. LESSONS
Lesson One: Da Vinci: The Man, The Genius
A. Daily Objectives:
   1. Concept Objectives:
      a. Students will recognize that the ideas of the Renaissance live on today.
      b. Students will learn to recognize and appreciate great works of art.
   2. Lesson Content:
      a. Leonardo da Vinci
      b. Renaissance ideals as embodied in "the Renaissance man"
   3. Skill Objectives:
      a. Students will read to increase knowledge of his/her own culture and the culture of others.
      b. Students will demonstrate an understanding of the term "Renaissance Man" by creating a personal collage.

B. Materials:
   1. One copy of *Da Vinci*, by Mike Venezia (or Ch. 6 from *Rats, Bulls, and Flying Machines*)
   2. Student copies of Kids Discover magazines, "Leonardo da Vinci"
   3. Magazines for students to cut apart
   4. Cardstock/file folders for student collages
   5. Scissors and glue for student use
   6. Sample Collage (Appendix A)

C. Key Vocabulary:
   1. Apprentice: a young person who works with an expert to learn a task or trade.
2. Renaissance Man: someone who is curious, well-rounded, and has multiple talents; a person who believes he can do anything he sets his mind to do.

D. Procedures/Activities:
1. Introduce the class to Leonardo da Vinci if they have not already met him in their study of the Renaissance. Explain that he was the ultimate "Renaissance Man," and discuss what that term might imply.
2. Read to the class about da Vinci and his life, using Venezia's Da Vinci, or Ch. 6 from Rats, Bulls and Flying Machines.
3. To extend students' understanding of the breadth of da Vinci's genius, allow them time to look with a partner at the Kids Discover magazine on da Vinci. Encourage them to look for the many interests and talents he had.
4. Pose the following questions for discussion: What made Leonardo da Vinci a "Renaissance Man?" What kind of talents and interests does such a person have? Can Renaissance people exist today? Whom do you think of when you think of a modern Renaissance person? Are YOU a Renaissance kid? Why/how?
5. To demonstrate their understanding of this concept, students will create a collage which focuses on their individual interests and talents. Give each child a body outline on cardstock to fill in with magazine pictures, words, or original drawings that show how he/she is striving to fulfill his/her maximum potential. The collages may be titled as such: Name: A Renaissance Girl!

E. Assessment/Evaluation:
1. Student collages should demonstrate the understanding of the idea of the "Renaissance Man" as a well-rounded individual with multiple interests and skills.

Lesson Two: Great Minds Ask Great Questions
A. Daily Objectives:
1. Concept Objectives:
   a. Students will understand that the ideals of the Renaissance live on today in us.
   b. Students will recognize and appreciate great works of art.
2. Lesson Content:
   a. The Florence Cathedral; dome designed by Filippo Brunelleschi
   b. Leonardo da Vinci
3. Skill Objectives:
   a. Students will practice fluency by brainstorming.
   b. Students will write to express, discover, record, develop, and reflect on ideas.
   c. Students will read to increase knowledge of the culture of others.

B. Materials:
1. Teacher copy of How To Think like Leonardo da Vinci, by Gelb
2. Student copies of Rats, Bulls, and Flying Machines, by Prum
3. Pictures of Florence Cathedral, if available
4. Bare books, one per student
5. Sample "Curiosita” pages (Appendix B)

C. Key Vocabulary:
1. Guild: special groups of merchants or craftsmen who joined together to protect their interests
2. Feat: a remarkable deed or accomplishment
3. Cathedral: the principal church of a district, headed by a bishop

D. Procedures/Activities:
1. Write the following statement on the board: "Great minds ask great questions." Discuss what this might mean. Think about the point that all great ideas stem from a question.

2. Introduce Filippo Brunelleschi as an artist from the early Renaissance whose architectural design addressed the following question: How to put a roof over a huge space.

3. Read about Brunelleschi from *Rats, Bulls, and Flying Machines*, pp. 39-41. Discuss and share how Brunelleschi answered that question--by creating the dome of the Florence Cathedral. Show photographs of the cathedral if available.

4. Share with students how Leonardo da Vinci was always posing questions--his personal journals are filled with them. Summarize information from the "Curiosita" chapter of Gelb's book.

5. Students will practice the art of questioning by choosing a topic from Leonardo's favorite list of topics: a bird in flight, flowing water, a knot or braid (see Gelb, p. 60). Have students choose one and write at least 10 questions about that one topic. There is no need to have the answers--just write the questions! Share these with the class.

6. At this point, pass out a bare book to each student. Explain that the cover will not be decorated until later. Have them number the pages in the book. The first page in the book is the title page on front and the Table of Contents on the back. The front side of the second page of the book will actually be page 1; the back will be page 2, and so on. (They should end up with 26 pages.) Students will begin the creation of their bare books with the principle of “Curiosita”. Each student will write 100 Questions on pp. 2-3 of their bare books. As Gelb suggests on p. 59, any question is appropriate as long as it is significant to the student! At first, they may balk at the idea of writing 100, but they soon take it on as a challenge! This may take students several days or even weeks, and may continue as they have free time throughout the unit. If they get stuck, encourage them to write questions like, "Why is my brain stuck? Why can't I think of anything to write?"... and they will soon become inspired again. (See Appendix B)

7. When students have completed their 100 Questions, have them look through them and notice themes that emerge. Are their questions mostly about school? Friends? Family? Have them choose their Top 10 Questions. These, and the themes they notice, will become page one of the bare book. This page may be labeled "Curiosita" and include the quote from procedure #1.

8. Go back to that quote, "Great minds ask great questions." What did students learn about the mental rigor required to simply ask questions? Apply this to the quote and see if students have gained new insight into this idea.

9. Students should begin thinking at this point about the cover of their books. We entitled our books “Ancora Imparo,” a quote by Michelangelo which means “Still I Am Learning.” This sentiment captures the reflective nature of the bare books and the personal growth that takes place in this unit. Students may write this on the cover, and then draw an illustration that reflects the statement. *Ancora Imparo* will also then be written on the title page, along with the author’s name and “copyright” date.

E. Assessment/Evaluation:

1. Assess 100 Questions, themes, and 10 Questions for completion only. There are no "right" questions, and students need to know their ideas are valued. (See Appendix O)

2. Assess knowledge of Brunelleschi on end-of-unit quiz, or check orally for
Lesson Three: Learning From Experience!

A. Daily Objectives:
   1. Concept Objectives:
      a. Students will understand that the ideas of the Renaissance live on today in us.
      b. Students will understand how a culture's social and political development are reflected in its art.
   2. Lesson Content:
      a. The influence of Greek and Roman artists on Renaissance artists.
      b. The shift in world view from medieval to Renaissance art; a new emphasis on humanity and the natural world.
   3. Skill Objectives:
      a. Students will write to express, discover, record, develop and reflect on ideas.
      b. Students will read to increase knowledge of the culture of others.
      c. Students will sequence events on a timeline.

B. Materials:
   1. Student copies of blank books
   2. Student copies of *Rats, Bulls, and Flying Machines*
   3. Teacher copy of *How To Think Like Leonardo da Vinci*, by Gelb
   4. Sample Dimostrazione page (Appendix C)
   5. Sample Affirmations page (Appendix D)

C. Key Vocabulary:
   2. Medieval era: also known as the Middle Ages; the time between the classical era and the Renaissance, from about AD 500-1350.
   3. Humanists: those like Petrarch in the late Middle Ages who were more interested in this this life and in what man could accomplish, as opposed to those who only thought about sacred matters and getting to heaven.

D. Procedures/Activities:
   1. Gelb's principle of Dimostrazione is "a commitment to test knowledge through experience, persistence, and a willingness to learn from mistakes." (p. 76)
      Introduce this principle to the class, and explain that learning from experience is exactly what happened as the Renaissance began! Some people were unhappy with how life was going during the Middle Ages, and they began to look back at the experience of the classical era.
   2. Read (or review) Ch. 1 from *Rats, Bulls and Flying Machines*. To help students get a sense of chronology, create a timeline on the board to show the three eras discussed (Classical Era, Middle Ages, Renaissance). Add in key events noted in the chapter.
   3. Share excerpts from Gelb's book about da Vinci's amazing capacity to learn from his experiences and mistakes. The kitchen fiasco on p. 79 is particularly interesting. Leonardo constantly challenged prevailing world views and theories and insisted on learning through experience and research. In success and failure, he looked for the lessons he could learn.
   4. Have students apply the principle of Dimostrazione by thinking of an experience in their lives that changed them. Brainstorm together a list of ideas: moving, loss of a family member or pet, involvement in a sport or activity, travel, etc. On page
4. Of the bare book, students will record this experience and the lesson they learned. (See Appendix C) for sample. This page may be titled, "Dimostrazione...Learning from Experience."

5. Another fascinating fact from Leonardo's journals is that they are filled with affirmations-- positive notes which da Vinci wrote to himself in the face of adversity--"Obstacles do not bend me; I do not depart from my furrow..." (see Gelb, pp. 87-90).

6. Students will write affirmations to place on page 5 of their bare books. Have them first write 10 positive statements about themselves on looseleaf paper. Give some examples to get them going: I am a hard worker! I am a loyal friend! I enjoy challenges!, etc. Then let them sit with a friend (their choice) to share their affirmations and offer more for their partner. (See Appendix D)

7. On page 5 of their books, students will record their six (or however many) favorite affirmations. Pages 4-5 in the books should then be illustrated with a common theme.

E. **Assessment/Evaluation:**
   1. Assess student understanding of the roots of the Renaissance in end-of-unit quiz, or check orally for comprehension.
   2. Assess personal experience and affirmations for completion. (See rubric, Appendix O)

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**Lesson Four: Using Your Senses!**

A. **Daily Objectives:**

1. **Concept Objectives:**
   a. Students will understand that the ideas of Renaissance live on today in us.
   b. Students will understand the relationship between the arts and the times during which they were created.

2. **Lesson Content:**
   a. Raphael's Madonnas
   b. Shift in world view from medieval to Renaissance art

3. **Skill Objectives:**
   a. Students will write to express, discover, record, develop and reflect on ideas.
   b. Students will compare and contrast Renaissance and medieval works of art.
   c. Students will select, organize and produce visuals to complement and extend meanings.
   d. Students will use literary devices effectively, such as figurative language.

B. **Materials:**

1. Student copies of blank books
2. Student copies of *Rats, Bulls and Flying Machines*
3. Teacher copy of *How to Think Like Leonardo da Vinci*
4. Various pictures or transparencies of art from the Middle Ages and the Renaissance
5. A recording of Beethoven's 5th Symphony (Disney's Fantasia 2000 recommended)
6. Another piece of "mood" music
7. Sample Sensazione page (See Appendix E and Sense Poem Appendix F)

C. **Key Vocabulary:**
1. Epitaph: words written on a tombstone in memory of a person buried there
2. Madonna: a picture of Mary, the mother of Jesus
3. Fresco: Italian word for "fresh;" refers to a technique of painting on damp plaster applied to a wall

D. **Procedures/Activities:**
1. Focus: Give small groups of students a collection of pictures that show art from the Middle Ages and the Renaissance. Instruct students to sort the pictures into two groups, based on which pictures evoke a more sensual response.
2. Allow students to share their groupings, and discuss if they are drawn to certain pictures or pieces of art more than others. Have them predict which art is from the Middle Ages, and which is from the Renaissance. Pose the question, "Does art change when society changes?" or "Is art a reflection of the times in which it was created?"
3. Read pp. 53-55 in *Rats, Bulls and Flying Machines* about Raphael the Painter and how art changed during the Renaissance by becoming more warm, vital, and human.
4. Gelb's principle of Sensazione is "the continual refinement of the senses, especially sight, as the means to enliven experience" (p. 94). Share from pages 95-97 how da Vinci constantly trained his senses, just as an athlete develops his muscles, to become more open to the world and what it had to teach him.
5. Allow students to analyze their "sense strengths" by reading the self-assessments on pp. 99-104 in the Gelb book. Ask, "Which is your strongest sense?" "Knowing that, how could you improve your life?" Set up the senses in 5 "corners" of your classroom and let them go to the corner that represents their strongest sense. Now...how can we improve the rest of our senses?
6. Listen to a piece of "mood music." Encourage students to describe the music in terms of their other senses by asking questions like, "What did the music look like in your mind?" "How did it feel? smell? taste?" Make the point that Leonardo challenged himself to look at things with ALL of his senses.
7. In the middle of page six of their bare books, have students draw a sense wheel (a circle) about 4" in diameter. Around the outside edge, they may write the following da Vinci quote, "The five senses are the ministers of the soul." Inside the circle, write "LOOKS LIKE", and at each corner of the page write SOUNDS LIKE, TASTES LIKE, FEELS LIKE, and SMELLS LIKE (See Appendix E). Then play a recording of Beethoven's 5th Symphony—ideally from the video *Fantasia*, but with the TV screen covered. Students will listen to the music and describe it in terms of all 5 senses. You may need to give some examples ahead of time, such as "Maybe it will sound like thunder, or maybe like a whisper." Students may write their ideas, or draw them on the page. We listened to it twice. The great thing about the video is after the students are through, you can let them see how Disney envisioned the piece and compare it to their own ideas.
8. Page seven of the bare book will demonstrate students' understanding of "Sensazione" through the creation of a sense poem (See Appendix F). Brainstorm with the class a list of topics for sense poems—ours included emotions (anger, love, joy, etc.), seasons, and abstract ideas such as family, war, etc. Then give them the skeleton for a sense poem for them to create in the bare books. For example: FAMILY is (color). It sounds like... It tastes like... It smells like... It looks like... It makes you feel like .... ! You may wish for them to try two, and choose their favorite one. After writing the poem in the book, students may decorate the two pages and title one of them "Sensazione...Continual Refinement of the Senses."
9. Extension: Another option is to allow students to draw a memory or image that has strongly moved or influenced them in some way.

E. Assessment/Evaluation:
1. Assess sense poem for completion and evidence of personal application and understanding. (See Rubric, Appendix D)
2. Check page six for completion and realistic responses.

Lesson Five: Powerful Paradoxes
A. Daily Objectives:
1. Concept Objectives:
   a. Students will recognize how the ideas of the Renaissance live on today.
   b. Students will learn to recognize and appreciate great works of art.
2. Lesson Content:
   a. Mona Lisa and technique of sfumato
   b. Genres of art: portraits
3. Skill Objectives:
   a. The student articulates and discusses themes and connections that cross cultures.
   b. The student defines and recognizes paradox and oxymora.
   c. The student defines and recognizes artistic technique of sfumato.

B. Materials:
1. Student copies of blank books
2. Teacher copy of How To Think Like Leonardo da Vinci
3. Large copy of the Mona Lisa to hang in classroom, or a transparency
4. Magazines for students to cut apart
5. Small photocopies of the Mona Lisa (5x7" size), one per student
6. Reading material on the Mona Lisa--Rats, Bulls and Flying Machines or “Kids Discover” magazine on Leonardo da Vinci
7. Leonardo da Vinci, by Buchholz for discussion of sfumato
8. Sample of sfumato pages (See Appendix G and H)

C. Key Vocabulary:
1. Paradox: a person or thing having qualities that seem to be opposites; or, a statement that seems to go against common sense but may still be true.
2. Sfumato: a way of painting that creates smooth changes between different areas of color and shading in a picture.
3. Oxymoron: a combination of contradictory words

D. Procedures/Activities:
1. Begin the lesson by giving each student a photocopy of the Mona Lisa to glue into page 8 of their blank books. In the middle of page 9, have them write, "Meditations on Mona" and draw some lines on which to write. (See Appendix G and H)
2. Display a picture or transparency of Mona Lisa and, without any introduction, have them look closely at her and record their reactions of the portrait. They may wish to begin with "She makes me feel..." Allow 5-10 minutes for this exercise, and then encourage students to share their responses.
3. Share information about the Mona Lisa with the class, including the genre of portraiture and the supposed subject of this painting. You may wish to read or review pp. 36-38 of Rats, Bulls and Flying Machines for this purpose, or the centerfold of Kids Discover. Discuss as well the technique of sfumato and how it is used in the background of this painting. Buchholz's Leonardo da Vinci (pp. 76-
77) has an excellent excerpt on this technique.

4. Then, share Gelb's interpretation of sfumato..."a willingness to embrace ambiguity, paradox, and uncertainty" (p. 142). Define or have students look up "paradox," and go back to their original meditations and how the Mona Lisa embodies paradox. (For example, she seems to be smiling, but her eyes look sad.)

5. In his book, Gelb explains the application of sfumato as being able to keep one's mind open in the face of uncertainty and paradox. Share excerpts from pp. 143-149 with the class about how Leonardo's continual questioning led him to many great discoveries, but to confusion and uncertainty as well. His journal show evidence of how he dealt with the "tension of opposites," in the form of knots, braids, puzzles, and riddles. The dinner party story on p. 145 is a must-share!

6. Have students think further about paradox by pairing opposite qualities like those seen in Mona Lisa, and write these in their books around Mona's picture. For example, joy/ sorrow; strength/weakness; young/old; good/evil, etc. You'll be surprised what they come up with. In one class, students discussed how the Grinch and Superman were examples of paradox. Include examples such as these on page 9 of the bare books.

7. This is a great time to have a discussion about the oxymoron and its place in literature. If you've read "Midsummer Night's Dream" with your class, they will remember "tragic mirth" and "most lamentable comedy." Our classes also referred to Juliet's "happy dagger" in our discussion of paradox.

8. Finish out pages 8-9 in the blank books with a title (Sfumato) and its definition. Students may wish to design a frame around Mona, list oxymora they remember, or include quotes from Da Vinci.

9. Activity: To practice the technique of sfumato, have students look through magazines and choose an object to cut out. Have them glue it into one of the back pages in their bare books, or onto a piece of paper. Then, they will attempt to create a sfumato-type background, blending the colors to create a mysterious, hazy quality like that behind Mona Lisa.

E. **Assessment/Evaluation:**
1. Assess student art for evidence of effort to create a hazy, mysterious background.
2. Students will be able to define paradox; sfumato on end-of-unit quiz.
3. Assess "Sfumato" pages in bare book using rubric (See Appendix O)

**Lesson Six: Balancing the Brain**

A. **Daily Objectives:**

1. Concept Objectives:
   a. Students will recognize how the ideas of the Renaissance live on today.
   b. Students will appreciate great works of art.

2. Lesson Content:
   a. Leonardo da Vinci
   b. "Proportions of Man", "Mona Lisa", "The Last Supper"

3. Skill Objectives:
   a. The student selects, organizes, and produces visuals to complement and extend meanings.
   b. The student analyzes and critiques the significance of visual messages, images, and meanings.
   c. The student understands and interprets visual messages.
   d. The student writes to express, discover, record, develop, reflect on ideas, and to problem solve.
   e. The student articulates and discusses themes and connections that cross
cultures.

B. Materials:
1. Teacher copy of How To Think Like Leonardo da Vinci by Gelb
2. Rats, Bulls and Flying Machines, by Prum page 36
3. Student copies of blank books
4. Bring unusual objects to place at each group of students (i.e., engine, old shoe, old purse, sculpture, etc.)
5. Overhead of "Mind Mapping" (p. 174, Gelb)
6. Map pencils
7. Leonardo da Vinci, by Diane Stanley
8. Sample “Arte/Scienze” pages (See Appendix I and J)

C. Key Vocabulary:
1. Mind mapping: a visual representation of ideas organized by key words, and sketches that branch out to connecting thoughts.
2. Ostinate rigore! - (obstinate rigor!): attention to detail, logic, mathematics and intense practical analysis.

D. Procedures/Activities:
1. Introduce the lesson by reading the self-assessment on p. 175 of Gelb's book. Split the class into left and right-brained thinkers. Discuss commonalities and differences among each section, one being artistic and the other more scientific in approach.
2. Discuss that for Leonardo, art and science were indivisible. Discuss the quote, "Study the science of art and the art of science." Did Leonardo da Vinci draw well because he knew of things or did he know about things because he drew so well? Discuss the term "obstinate rigore!" Seeing for drawing means looking at things as if you've never seen them before. Label pages 10-11 in bare books, "Arte/Scienca: Whole Brain Thinking."
3. Refer to page 36 in Rats and Bulls and Dianne Stanley's book entitled Leonardo da Vinci (anatomy and nature pages) to discuss how Leonardo explored every field of science. View his anatomical drawings and notice the perspective from which he drew.
4. Write the term ostinate rigore! on page 10 in the blank book. Place an object in the center of small groups of students. Draw attention to hues, shapes, and textures. Give students 15 minutes to sketch the object in their blank books on page 10. Attention to detail is more important than artistic ability. (See Appendix J)
5. Write the question: "Is art an invention or a discovery?" underneath the drawing and let students journal their response from class discussion.
6. Discuss "mind mapping" with students. Explain the meaning and the rules for mind mapping (p. 176 of Gelb).
7. Have student create their own map on page 11 of their bare books, by choosing a favorite hobby, interest or topic that interests them (See Gelb p. 178 - 184). Their maps should reflect a generation of ideas expanded from one topic, guiding them to their own unique creativity. (See Appendix J)
8. When finished, students evaluate their maps (see p. 186): Did you create vivid, multicolored images? Did you remember to use just one word per line? Did you print your key words? Did you keep your lines connected?
9. After students have completed this exercise, discuss its uses in life: strategic planning, management, speeches, test preparation (visualization), etc. Mind mapping assists us in memorizing, balancing our brains and becoming inventors of ideas.
E. **Assessment/Evaluation:**
   1. Assess sketching and mind mapping for completion and evidence of personal application and understanding (See rubric, Appendix)

**Lesson Seven: Mind and Body**

A. **Daily Objectives:**
   1. **Concept Objectives:**
      a. Students will understand how a culture's social and political development are reflected in its art.
      b. Students will learn to recognize and appreciate great works of art.
   2. **Lesson Content:**
      a. Michelangelo's life and art
      b. Genre of art: sculpture
   3. **Skill Objectives:**
      a. Students will identify art by Michelangelo, including the "David", the "Pieta" and scenes from the Sistine Chapel ceiling
      b. Students will identify Donatello's "David"
      c. Students will create a wire sculpture to show the human form in motion

B. **Materials:**
   1. Teacher copy of *Michelangelo* by Mike Venezia
   2. Teacher copy of *How to Think Like Leonardo da Vinci*
   3. Student copies of blank books
   4. Copper wire, enough for each student to make a wire sculpture
   5. Modeling clay
   6. Ingredients for minestrone soup (optional--see Gelb, p. 136)
   7. Posters, slides, or transparencies of David, the Pieta, and scenes from the Sistine Chapel (if available)
   8. Copy of da Vinci's "Proportions of Man" to show
   10. Sample “Corporalita” pages (See Appendix K and L)

C. **Key Vocabulary:**
   1. Ambidexterity: the ability to use both hands with equal ease
   2. Poise: a stably balanced state; to hold or carry in equilibrium

D. **Procedures/Activities:**
   1. Begin this lesson by leading an aerobic workout! This will get students' blood pumping and their minds ready to think about the importance of physical exercise! Discuss (or review) with students the new emphasis during the Renaissance on portraying the human figure in a realistic manner. Even in the early Renaissance, when artists were still mostly painting sacred subjects, they began to show those figures in a human condition and lifelike state.
   2. Donatello was one of the first early sculptors whose work began to reflect this shift. He focused on the physicality and vitality of his subjects, even Biblical ones. Show his bronze "David," the first freestanding nude sculpture in western Europe since classical times. Donatello's emphasis on the grace of the human figure would pave the way for Michelangelo's David in the High Renaissance.
   3. Share the life and work of Michelangelo by reading Venezia's picture book, *Michelangelo*. As you read, look for examples of how he portrays the human figure. If possible, have large posters or transparencies so students can see his works up close.
   4. Put the following phrase on the board: "Mens sana in corpore sano" (A sound mind in a sound body). What do students think this means? Explain that this
phrase was an ancient classical ideal, and Leonardo da Vinci lived this ideal to the utmost!

5. Talk with students about the stereotype of a smart person being physically inferior. Leonardo was just the opposite! Not only was he a genius mentally, he was also in superb physical condition. Share from Gelb's book pp. 193-195 about Leonardo's physical prowess. If desired, practice walking with good posture by balancing books on your heads.

6. In their blank books, students will work on pages 12-13. Have them write "Corporalita," its definition, and "Mens sana in corpore sano." Then share with them Leonardo's Rules for Well-Being from p. 194 of Gelb to put in their books. Encourage them to add their own guidelines for a healthy lifestyle (Don't smoke, etc.)!

7. To complete these two pages, students will practice ambidexterity. Pages 214-216 in Gelb have fun ideas to try. We tried writing with our non-dominant hand, mirror writing, and on page 13 practiced by doing an "upside-down" drawing of the maestro. (We put a picture of him upside-down on the overhead, and students had to try to recreate it in their books. See Appendix L)

E. Assessment/Evaluation:
1. Assess "Corporalita" pages for completion using rubric (Appendix O)
2. Students will identify Donatello's David and works of Michelangelo on end-of-unit quiz

Lesson Eight: Making Connections
A. Daily Objectives:
1. Concept Objectives:
   a. Students will recognize how the ideas of the Renaissance live on today.
   b. Students will learn to recognize and appreciate great works of art.

2. Lesson Content:
   a. Da Vinci's "The Last Supper"
   b. Observe and discuss works in different genres (fresco); linear perspective

3. Skill Objectives:
   a. Students will understand and interpret visual messages.
   b. Students will analyze content and technique of "The Last Supper."
   c. Students will articulate and discuss themes and connections that cross cultures.

B. Materials:
1. Student copies of blank books
2. Teacher copy of How To Think Like Leonardo da Vinci
3. Large copy of da Vinci's “The Last Supper,” or multiple student copies (Rats, Bulls, and Flying Machines)
4. Student copies of Rats, Bulls, and Flying Machines (or other source with information about this painting)
5. Sample “Connessione” page (See Appendix M)

C. Key Vocabulary:
1. Perspective: the technique of representing on a plane or curved surface the spatial relation of objects as they might appear to the eye
2. Betray: to deliver to an enemy by treachery
3. Vanishing point: the point at which two or more parallel lines receding from the viewer appear to meet on the horizon.

D. Procedures/Activities:
1. Help students to get a sense of how the disciples felt when Jesus made the
shocking announcement that one of them would betray him with the following focus activity: Begin your lesson (or day) with a somber expression. Tell the class you have a sad, important announcement to make. Explain that for reasons you are not at liberty to discuss, you will be resigning from your teaching position as of (give a time/date), and will not finish out the year as their teacher. Someone else will sub for the class for the rest of the year, etc.... and so on. Carefully note the expressions on students' faces and their comments. It would be ideal to secretly tape or videotape this announcement!

2. At some later point, reassure the class you were just kidding. Have a discussion about what it feels like to get a shocking, unexpected announcement like that. Share the comments you heard or get students to recall what expressions they saw reflected in the faces of other students.

3. Introduce Leonardo's famous painting, The Last Supper. Explain that he decided to capture the reactions of the disciples when Jesus told them that one of them, his most trusted friends, would betray him. Introduce/discuss the word "betray" if students are not familiar with this word. If appropriate, you may choose to give some background for this Bible story to put it into context (see Mark Ch. 14). Look at the painting and carefully study the disciples' expressions. Can they guess who the betrayer is? (Judas is the third figure to the left of Jesus. His face is entirely in a shadow, and he is leaning back, holding a bag of silver.)

4. Read with students about "The Last Supper" and its creation. Chapter Six of Rats, Bulls and Flying Machines has a good summary.

5. Be sure to read about and discuss how Leonardo uses linear perspective in this painting. (See pages 34-35 in Rats & Bulls).

6. The last da Vincian principle in Gelb's book is Connessione, "a recognition and appreciation for the interconnectedness of all things and phenomena (p. 220). Introduce students to this principle and continue your class analysis of "The Last Supper" by considering the following questions: How is the inside of the room connected to the outside? How are facial features and body positions connected to Jesus' statement? How is the theme of the painting connected to the building it is in? How is light connected to darkness? How is Judas' reaction connected to his betrayal? How is the technique da Vinci used connected to how long the painting lasted?

7. Da Vinci was constantly looking for connections--his notebooks are full of observations of patterns and connections in the world around him. Share with students the story of the peasant shield Leonardo designed from pp. 222-224 of Gelb. He created a fearsome dragon by combining elements of many other creatures.

8. On pages 14 and 15 in their bare books, students will create their own "dragons." This activity is from Gelb, pp. 233-234. Students will consider two very different things and find connections between them. Guide students by doing the first example together—a bullfrog and the Internet. Draw the two next to each other, with an arrow joining them to a connection: for example, a frog hops, and the Internet allows you to "hop" from site to site. Students will fill these two pages with more examples. Use Gelb's suggestions or let students make up their own! (See Appendix M)

9. At this point, students may be ready to create an impresa. An impresa (emblem) was used by scholars, nobles, and princes during the Renaissance--it was their personal "logo" or signature (see Gelb, p. 245). The impresa should be drawn on the front inside cover of the bare book. Encourage students to work on a rough draft before putting it in the book.
Lesson Nine: Discoveries

A. Daily Objectives:
   1. Concept Objectives:
      a. Students will recognize how the ideas of the Renaissance live on today.
      b. Students will appreciate and recognize great works of art.
   2. Lesson Content:
      a. Self-portraits
      b. Self portraits of da Vinci, Durer, Raphael, and Rembrandt
   3. Skill Objectives:
      a. The student connects his/her own experiences, information, insights and ideas with the experiences of others through speaking and listening.
      b. The student understands and interprets visual messages.
      c. The student analyzes and critiques the significance of visual messages, images and meanings.

B. Materials:
   1. *Rats, Bulls and Flying Machines* by Prum, Chapter 10
   2. *Portraits* by Penny King and Clare Roundhill
   3. Teacher copy of *How to Think like Leonardo da Vinci* by Gelb, pp 304-305

C. Key Vocabulary:
   1. Portrait - a drawing or painting of himself/herself done by the artist

D. Procedures/Activities:
   1. Discuss that the purpose of drawing is discovery. Place this quote on the next page. Explain that they will be doing a self portrait and that knowing how to see themselves analytically will help them sketch themselves.
   2. Read about self-portraits from Chapter 10 of *Rats, Bulls and Flying Machines*. Emphasize works of Van Eyck and Durer, pp. 58-59. (Durer’s self-portrait is on the end-of-unit quiz)
   3. Pass out mirrors to each student. Have them study their own face. Look as if it were the first time. Is it round? Oval? Square? They should draw this shape in their blank book on page 18.
   4. Look at the nose, eyes and mouth. Search for triangles, circles and curves, lines and dots. Sketch in the basic features.
   5. Read about self-portraits from Chapter 10 of *Rats, Bulls and Flying Machines*. Emphasize works of Van Eyck and Durer, pp. 58-59. (Durer’s self-portrait is on the end-of-unit quiz).
   6. Finally, gently color in hues, giving features the color that you see. At the bottom of the page have them write a positive statement about something they discovered about themselves.
   7. Invite students to study faces and begin to record their sketches with dates and signature like da Vinci did in his notebooks.
   8. The drawings will become a symbol of their evolving vision of how they see the world and humanity.

E. Assessment/Evaluation:
   1. Assess student drawing and response based on completion, willingness to work thoughtfully, and response to discovery.
Lesson Ten: Reflections

A. Daily Objectives:
   1. Concept Objectives:
      a. Students will recognize how the ideas of the Renaissance live on today.
      b. Students will learn to recognize and appreciate great works of art.
   2. Lesson Content:
      a. Review of Renaissance art
      b. Leonardo da Vinci
   3. Skill Objectives:
      a. Students will select, organize, and produce visuals to complement and extend meanings.
      b. Students will write to express, record, develop, reflect on ideas, and to problem solve.
      c. Students will demonstrate knowledge of Renaissance art.

B. Materials:
   1. Student copies of bare books
   2. Copies of end-of-unit quiz (Appendix--)
   3. Teacher copy of How To Think Like Leonardo da Vinci

C. Key Vocabulary:
   1. N/A

D. Procedures/Activities:
   1. This is the lesson to put everything together and assess the impact of the unit on your students. In this lesson, students will write and draw to reflect what they have learned and how they have grown in this study of Leonardo da Vinci. This is also the time for students to put the final touches on their books.
   2. Students will choose two of the following questions, and write their responses on page 19 in their bare books. (They may wish to draw lines.) Questions: What da Vincian principle has impacted you the most and why? How are you like Leonardo da Vinci? What have you discovered about yourself during this study? What have you learned about the Renaissance by studying Leonardo da Vinci? What was your favorite piece of Renaissance art, and why?
   3. Another option for writing you can offer is to let students choose a quote from Leonardo and reflect on it. See Gelb, p. 251, for ideas in addition to those already covered in this study.
   4. On page 18, students will draw a self-portrait. Provide small mirrors for this activity. Encourage them to think positively and not be critical of their efforts. Have them sign and date their masterpiece!
   5. Students will complete an “About the Author” section on the back inside cover of their books. Read a few examples from “real” books in your classroom. Our students used their small adhesive school pictures and wrote about where they were born, something about their personal lives, and information about their hobbies and interests. They may also choose to dedicate the book to someone. See sample page (Appendix N, only available at the conference)
   6. Students will take an end-of-unit visual quiz to demonstrate their knowledge and recognition of the art discussed in this unit. The quiz is in the form of a powerpoint presentation. Students will view the presentation and write their answers on a sheet of paper. (You may wish to use this throughout the unit as a continual review, and show again at the end as the test.) To access the presentation, see power point file titled “Leonardo Lives On #2”

E. Assessment/Evaluation:
VI. CULMINATING ACTIVITY
A. The culminating activity for this unit also served as the final activity of our Renaissance study. The products from the activities outlined below were saved and included in the last pages of students' bare books. Each fifth grade teacher at our school was in charge of a different Renaissance station (we had six). Students rotated through all of the stations in the course of an entire day. In our case, each session was 45 minutes long. Most of these activities can be found in the Teacher Created Materials unit entitled "Renaissance."

B. Station #1: Human Body Proportions (TCM pp. 56-57). Students examine the relationships between body proportions. Use this opportunity to show da Vinci's "Proportions of Man" if you have not done so already. After students have finished measuring each other, they can practice drawing a human face by dividing it into thirds: forehead to eyebrow, eyebrow to nose, nose to chin. Place body diagram with measurements and face drawings in bare books.

C. Station #2: Great Minds Don't Think Alike (TCM p. 67). Students use objects in a bag to create an invention of their own design. Look back at the KidsDiscover Magazine centerfold on Leonardo's inventions to get their creative juices flowing. They can draw and write about their invention in their bare books when finished.

D. Station #3: Mirror and Code Writing (TCM p. 47). Students experiment with mirror writing as seen in da Vinci's many journals. Have small hand mirrors available for this session. They may write a message in their bare books. If time allows, experiment with a variety of alphabet codes (A=D, B=E, etc.). As an extension, have them write some goals they wish to achieve in life in their bare books (in mirror writing, of course!).

E. Station #4: Soap Sculpting (TCM p. 46). What is it like to be a sculptor? Harder than students might think! In this activity, they will attempt to form an object by sculpting a piece of soap or clay. Read from Diane Stanley's Michelangelo before you begin to set the mood. This activity requires a bar of soap/piece of clay for each student, plastic knives and toothpicks, water, and small objects or toys as models.

F. Station #5: The Sistene Chapel (TCM p. 45). Students experience the frustration Michelangelo must have felt trying to paint above his head! This activity has students paint above them while reaching to a paper taped under the desk. Again, use Diane Stanley's book Michelangelo for background. She points out that he probably did not lay flat to paint, but rather stood on a scaffold and reached up. Either way, this is a great activity to get students imagining what four years working like that might have been like. We adapted this activity by giving the students a stain-glass design to "color" in with paint, rather than having them try to create an original work. These were then glued into the bare books.

G. Station #6: Modern Day Mona. This activity comes from a variety of sources. Students will reproduce the "Mona Lisa" figure in proportion and gesture, but change the setting, background, costume and/or accessories to a modern-day situation. For example, one student created "Mall Mona," and showed her sitting in our local mall with a purse, cute clothes, and sunglasses. Another example is "Alamona," which shows her in front of the Alamo in San Antonio. Have a copy of Mona to display for this activity. Student products will be placed in the back of the bare books.

VII. HANDOUTS/WORKSHEETS
See Appendices

VIII. BIBLIOGRAPHY
A. A. Buchholz, Elke Linda Hong Kong: Barnes and Noble, 2000. 0-7607-2162-9 Leonardo
da Vinci


M. Pierre, Michel Italy: Banres and Noble, 1999. 0-7607-1264-6 The Renaissance

N. Prum, Deborah Canada: Core Knowledge Foundation, 1999. 1-890517-18-6 Rats, Bulls, and Flying Machines


Appendix A

I'm a renaissance boy!!!
Appendix B

Curiosità

A great mind asks great questions!

"The desire to know is natural among good men."

How can I make the world a better place?

Don't take Yes for an answer!
Testing knowledge through experience
Learning from mistakes

An important experience in my life was when I met Charles Austin who is an olympic athlete who was also my soccer and basketball coach. He encouraged me to be an athlete and I am beginning to become one!

BASKETBALL! SOCCER!
AFFIRMATIONS

I always try my best!

I am a honest person!

I feel reliable!

I am respectful to others!

Family is important to me!

I am compassionate!

I am trustworthy!
Appendix E

Sensazione!!!
Tastes Like
popcorn
Smells Like
bitter, sour

The five senses are the ministers of the soul

Looks Like
WAR!!!

Sounds Like
people arguing
a food fight
glass breaking
fireworks

Feels Like
an earthquake
Appendix F

Sense Poem

Fear...

is black.

It sounds like people yelling, "HELP!"

It tastes like molded bread.

It smells like dried blood.

It looks like a dark cave.

It makes me feel very lonely.

Where am I?!?!?!?!
Appendix G
Appendix H

Sfumato.....going up in smoke

The world is a paradox: one form merges with another, always leaving something to our imagination.

Meditations on Mona Lisa:
She makes me feel sleepy.
She makes me feel worried.
She makes me feel scared.
She makes me feel pale.
She makes me feel lonely.
She makes me feel sick.

Oxymora: hot ice, San Antonio snow, tedious brief scene, tragic mirth, freeze burn, a bright night, happy dagger
Appendix I

Art / Scienza... Development of the Balance between Science and Art, Logic and Imagination ("Whole-Brain" Thinking)

"Study the science of art and the art of science." - Leonardo da Vinci
Appendix J

The Rules of Mind Mapping

- Use keywords
- Connect lines
- Radiate
- Central image start
- One color
- Print
- starch

Mind Mapping
CORPORALITA!!!

Practicing Grace, Ambidexterity, Fitness, and Poise

- Exercise!
- Be well covered at night
- Eat simple food (vegetarian)
- Chew well
- Avoid grievous moods (bad)
- Be cheerful
- Stand up straight
- Don't pig out
- Go to the toilet regularly!

Ambidexterity
CONNESSIONE!!!
An appreciation of the interconnectedness of all things

Making Dragons

- Frog hops and internet hops from site to site
- Frog has webbed feet and internet connects you to world wide web
Appendix N

End of Unit Quiz

You can e-mail Laura Eberle (leber 136@neisd.net) or Shelly Reaves (sreav136@neisd.net) for a copy of this quiz in Power Point.

Slide 1: Who created this dome?
   In what city is this cathedral located?
   (Note: Picture of the Florence Cathedral by Brunellischi can be found on pages 40-41 in Rats, Bulls & Flying Machines)

Slide 2: What Renaissance artist painted this ceiling?
   What is the name of the chapel where it is located?
   (Note: Picture of the Ceiling of the Sistine Chapel by Michelangelo can be found on page 49 in Rats, Bulls & Flying Machines)

Slide 3: What is the name of this sculpture?
   Who is the artist?
   (Note: Picture of Michelangelo’s David can be found on page 47 in Rats, Bulls & Flying Machines)

Slide 4: Name the artist that sculpted this piece.
   What is it called??
   (Note: A picture of Donatello’s David can be found at: http://www.bluffton.edu/~sullivanm/bargello/david.html)

Slide 5: Who created this portrait?
   What do you call this type of portrait?
   (Note: Picture of Durer’s Self-Portrait, 1498 can be found on page 59 in Rats, Bulls & Flying Machines)

Slide 6: Who painted this fresco? What is it called?
   What type of perspective did he use?
   (Note: Picture of Leonardo da Vinci’s The Last Supper can be found on page 34 in Rats, Bulls & Flying Machines)

Slide 7: Who created this painting of Mary and the baby Jesus?
   What do you call paintings with this subject matter?
   (Note: Picture of Raphael’s Small Cowper Madonna can be found on page 54 in Rats, Bulls & Flying Machines)

Slide 8: What artistic technique was used in the background?
   Name the painting and artist.
   (Note: Picture of da Vinci’s Mona Lisa can be found on page 37 in Rats, Bulls & Flying Machines)

Slide 9: Name the sculpture and the sculptor for this piece.
   What makes it unique among this artist’s work?
   (Note: Picture of Michelangelo's Pieta can be found on page 45 in Rats, Bulls & Flying Machines)
Slide 10: Name this diagram.
Who drew it?
(Note: Picture can be found on page 36 in Rats, Bulls & Flying Machines)

Sources: Rats, Bulls & Flying Machines (paperback: 1-890517-18-6)