

Integration of Content Areas Through Hands – On Literacy Stations

Grade Level or Special Area: Grade 4

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Length of Unit: 5 lessons and culminating activity

I. ABSTRACT

Within the *Integration of Content Areas Through Hands-On Literacy Stations* unit, students will participate in a variety of integrated learning activities from designing “tree cookie” time lines and rock layer sandwiches, to producing cookie dough fossils and original African basket weavings. The American Revolution, The Art of Africa, The Circulatory System, Geology, and Measurement are all reviewed within these station activities. In the culminating activity, the activities will be pulled together to incorporate several Grade 4 sayings & phrases. All literacy stations are based upon required Grade 4 SCOS and Core Knowledge curricula.

II. OVERVIEW

A. Concept Objectives

1. Students will make connections across a variety of curriculum units.
2. Students will engage in Hands-On Literacy Stations activities that integrate curriculum areas.
3. Students will organize information into various formats.
4. Students will recognize the appropriate use of sayings and phrases in relation to the curriculum areas of study.

B. Content from the *Core Knowledge Sequence*

1. Sayings (p. 90)
2. American Revolution (p. 94)
3. The Art of Africa (p. 97)
4. Measurement (p. 102-103)
5. The Circulatory System (p. 104)
6. Geology: The Earth and its Changes (p. 105)

C. Skill Objectives – (NC SCOS)

1. Research using a variety of resources.
2. Organize information into chronological order.
3. Demonstrate knowledge by presenting research in different formats.
4. Locate & Identify complex patterning.
5. Devise & apply individual pattern scheme to create final product.
6. Measure using appropriate units of weight and mass.
7. Solve problems using concepts and procedures using equivalent measures.
8. Demonstrate & create models of examples of cast and mold fossils.
9. Verify accuracy of fossil examples through writing and diagram.
10. Data collection through use of physical activity, pulse, and timing.
11. Transferring information from one format to another.
12. Applying knowledge to answer multi-step questions.
13. Review knowledge of rock layers of the Earth.

14. Demonstrate knowledge of rock layers by using various food items to create a model and diagram.
15. Use model to demonstrate fault line and earthquake.

III. BACKGROUND KNOWLEDGE

A. For Teachers

1. E.D.Hirsch, Jr. (1992) *What Your 4th Grader Needs to Know*. Core Knowledge Publications, Inc.: Core Knowledge Foundation (pp. 72-84, 163-206, 239-240, 299-301, 313-324, 326-330)
2. General Literacy Station Information
www.swlauriersb.qc.ca/schools/crestview/ls/Teacher/Teacher_General_Literacy.htm.
3. Fountas, Irene C. & Pinnell, Gay Su. *Guided Reading, Good First Teaching for All Children*. Heinemann, Portsmouth, NH. ISBN 0-435-08863-7. (Pp. 189-211)

B. For Students

1. Understanding of Literacy Stations and ability to participate in them.
2. Definition and function of sayings
3. Knowledge of cause and effect
4. Exposure to timelines
5. Ability to create color & number patterns
6. Participation in Measurement unit
7. Knowledge of the function of the heart
8. Ability to use a stopwatch
9. Ability to perform common exercises (hopping, jumping jacks, etc.)
10. Participation in Rock Unit
11. Knowledge of definitions of igneous, metamorphic, sedimentary rocks
12. Knowledge of definition of earthquake

IV. RESOURCES

- A. E.D.Hirsch, Jr. (1992) *What Your 4th Grader Needs to Know*. Core Knowledge Publications, Inc.: Core Knowledge Foundation
- B. Fountas, Irene C. & Pinnell, Gay Su. *Guided Reading, Good First Teaching for All Children*. Heinemann, Portsmouth, NH. ISBN 0-435-08863-7
- C. Kids Discover. (2002) *American Revolution* New York, NY. ISSN 1054-2868
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- E. Time line web site: www.edhelper.com/timelines.htm
- F. Merrill, Yvonne Y. (2000). *Hands-on Africa* Kits Publishing. Salt Lake City, Utah. ISBN 0-9643177-7-X
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- J. Musgrove, Margaret W. (2001). *Spider Weaver: A Legend of Kente Cloth*. Blue Sky Press (AZ). ISBN: 0590987879

- K. African paper weaving website:
[www.thewalters.org/wcontent/files/pdfs/African Paper weaving](http://www.thewalters.org/wcontent/files/pdfs/African_Paper_weaving).
- L. Houghton Mifflin Math – North Carolina. (2005). Measurement and Graphing Unit. (Pp. 305 – 331) ISBN 0-618-38876-1
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- P. Delta Science Readers. (2004). *Rocks & Minerals* Nashua, NH. ISBN-13: 978-1-59242-375-0
- Q. Kids Discover. (2002). *Rocks*. NY. ISSN 1054-2868
- R. Squire, Ann O. (2002). *Rocks and Minerals*. Children’s Press. USA. ISBN 0-516-22505-7
- S. MacMillan/McGraw-Hill. (1995). *Earth Beneath your Feet*. New York. ISBN 0-02-276112-8/3
- T. Student individually recorded notes from subject notebooks

V. LESSONS

Lesson One: “On the Warpath” to the American Revolution

- A. *Daily Objectives* (Lesson content, concept objectives, and skill objectives should all be listed in the Overview section as well.)
 - 1. Concept Objective(s)
 - a. Students will organize information into various formats.
 - 2. Lesson Content
 - a. *Core Knowledge Sequence* pp. 90, 94
 - b. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 82
 - c. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 163-206
 - d. Kids Discover. *American Revolution*
 - e. *Give me Liberty! The Story of the Declaration of Independence*. Russell Freedman
 - 3. Skill Objective(s)
 - a. Research using a variety of resources.
 - b. Organize information into chronological order.
 - c. Demonstrate knowledge by presenting research in different formats.
- B. *Materials*
 - 1. American Revolution resources
 - 2. Social Studies notebook
 - 3. Sample “tree cookie” (Attachment 1-A)
 - 4. Sample time line (Attachment 1-B)
 - 5. American Revolution Events (Attachment 1-C)
 - 6. Tree Cookie Project Outline (Attachment 1-D)
 - 7. 11”x18” butcher paper
 - 8. Drawing instruments (colored pencils, markers, crayons, etc.)
 - 9. Grading rubric (Attachment 1-E)
 - 10. Tree cookie prompt (Attachment 1-F)

11. An actual tree cookie (or slice) can be obtained by contacting a landscaping or tree cutting service. Businesses are usually very generous in donating educational supplies, especially if they can have free advertising!

C. *Key Vocabulary*

1. “On the warpath” – describes someone who is angry or in a bad mood and is eager to get into a fight.
2. time line – dates and events written in chronological order on a line.
3. chronological order – placing dates in order of how they happened
4. tree “cookie” – a slice of a tree that has been cut down that shows the inner rings
5. range – difference between the greatest number and the least number

D. *Procedures/Activities*

1. Students review the events that led to the American Revolution with a quick brainstorm discussion. This brainstorm should list only the events, not necessarily in order or with dates. Brainstorm can be listed on the white board or on chart paper.
2. Teacher will write “chronological order” on the white board and ask the students to define it. If an appropriate definition is not given, the words can be looked up in a dictionary.
3. Teacher will ask the students if the American Revolution list of events is in chronological order. Answers will vary depending on the list. For example, some events may be in order and some may not.
4. Teacher will write “time line” on the white board and ask the students to define it. If an appropriate definition is not given, the word can be looked up in a dictionary.
5. Students will be asked to make the connection between a chronological time line and the American Revolution.
6. Once the connection has been made, inform the student that they will be making a timeline. This timeline will be converted into a “tree cookie”. Both will record the major events leading up to the American Revolution. The work will be done during Literacy Stations. (“tree cookie” will be defined later in the lesson. If asked, tell the students it is a surprise activity!)
7. Teacher will model the Literacy Station activity using a topic other than American Revolution. The topic can be any event that has taken place over a period of time.
8. Teacher will demonstrate the process using the topic “The Life of my Teacher”. (Feel free to use another series of events.)
9. Students will brainstorm various events regarding the teacher’s life. Examples: birthday, first day of school, graduation from HS/college, wedding, or any other special events. Teacher will provide the dates. The events and dates should be presented out of chronological order.
10. In small groups, the students will put the information into chronological order. (See Attachment 1-B)
11. Teacher will distribute the sample tree cookie. (See Attachment 1-A)
12. Students will compare their time lines to the tree cookie. Teacher will clarify any questions.
13. Teacher will explain. *A tree has fallen in the forest during the time of the American Revolution. The rings of the tree determine its age. A slice of the tree*

can be called a “tree cookie”. Using your American Revolution time line, draw a tree cookie. The number of rings is determined by the range of the years. Once drawn, record the information from the time line onto the tree cookie. (See Attachment 1-F)

14. Teacher will distribute the Tree Cookie Project Outline. (See Attachment 1-D)
15. Teacher will write the saying “On the warpath” on the board and ask the students to be thinking about the meaning of this saying and how it relates to the activity.
16. Teacher will clarify any additional questions.
17. Students will complete this Literacy Station individually during Guided Reading.
18. Teacher will provide the necessary resources to research the American Revolution events and dates.
19. This Literacy Station should be done at the end of the American Revolution unit. Students should have access to a variety of materials including: books, web sites, recorded notes in their Social Studies notebooks, etc.
20. Additional enrichment activities: Student will write a description of what caused the tree to fall. Student will illustrate the fall of the tree.
21. Lesson modification: Teacher can provide the students with American Revolution Events (see Attachment 1-C)

E. *Assessment/Evaluation*

1. Students will complete the “Tree Cookie” literacy station using the project outline. (See Attachment 1-D)
2. Teacher will assess the project using the grading rubric.
3. Students will share their tree cookies with the class once completed.

Lesson Two: Follow the Weaving Pattern, “Etc., Etc., Etc.”

A. *Daily Objectives*

1. Concept Objective(s)
 - a. Students will engage in Hands-On Literacy Stations activities that integrate curriculum areas.
 - b. Students will make connections across a variety of curriculum units.
2. Lesson Content
 - a. *Core Knowledge Sequence* pp. 90, 93
 - b. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp.81
3. Skill Objective(s)
 - a. Locate & Identify complex patterning.
 - b. Devise & apply individual pattern scheme to create final product.

B. *Materials*

1. List of websites that display African colors in art & clothing (Appendix 2-A)
2. Math notebook with student patterns
3. 8” wax coated paper cups – one per student
4. spools of yarn in a variety of solid bright colors precut to 1 yard length
5. African vessel student instructions. (Appendix 2-B)
6. Adult scissors

C. *Key Vocabulary*

1. “etc., etc., etc.” – abbreviation of “et cetera”, a Latin phrase for “and the rest” It Means ‘and so forth’, or ‘and so on’.
2. pattern – a repetition of events, shapes, colors, etc.
3. weave/weaving – to interlace (yarns, strips, etc.) so as to form a fabric or material
4. vessel – a hollow utensil used for holding liquids

D. *Procedures/Activities*

1. Students preview the art of African countries as they learn the history. This activity should be taught after the majority of the unit is complete. (Appendix 2-A)
2. Students design 3-color patterns using the colors of African art and clothing.
3. Teacher explains that the following Literacy Station combines the patterning done in Math with the African studies of Social Studies.
4. Teacher writes the word “vessel” on the white board. Students define the word from prior knowledge, or by using a dictionary.
5. Teacher shows samples of the African vessel project at the following 3 stages: beginning with the sectioned cup and yarn separated, a vessel half finished, and a final product. These samples should be made in advance.
6. Teacher tells students to refer to their African pattern to determine their first & second colors.
7. *Teacher distributes the following materials: precut sectioned cup and 2 pieces of yarn, 1 yard each in length, colors by student choice.
8. Teacher guides students in beginning their weave at the base of the cup. (Appendix 2-B)
9. Students weave the first piece of yarn around the cup stopping when there are 2” left. (Appendix 2-B)
10. Teacher demonstrates tying the second piece of yarn to the first. The students follow suit. (Appendix 2-B)
11. Once all vessels have completed this step, the students will tuck the second piece of yarn into the cup.
12. Teacher tells students that they will continue to work on and complete their African vessels during Literacy Stations.
13. Teacher will write the saying “Etc., etc., etc” on the board and ask the students to be thinking about the meaning of this saying as they create the pattern for their vessel.
14. *Parent *volunteers would be of great assistance during this lesson.*

E. *Assessment/Evaluation*

1. Students will complete their African vessels following the student directions (Appendix 2-B)
2. Enrichment activities - Students can illustrate & write about what part of Africa their vessel represents. Students can write a diary entry pretending to be the African person who made the vessel.

Lesson Three: “As the Crow Flies” Through Measurement

A. *Daily Objectives*

1. Concept Objective(s)
 - a. Students will organize information into various formats.

- b. Students will engage in Hands-On Literacy Stations activities that integrate curriculum areas.
- 2. Lesson Content
 - a. *Core Knowledge Sequence* pp. 90, 102
 - b. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 79
 - c. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 299, 313
 - d. Measurement (p. 102-103)
 - e. Geology: The Earth and It's Changes (p. 105)
- 3. Skill Objective(s)
 - a. Measure using appropriate units of weight and mass
 - b. Solve problems using concepts and procedures using equivalent measures
 - c. Demonstrate & create models of examples of cast and mold fossils
 - d. Verify accuracy of fossil examples through writing and diagram

B. *Materials*

- 1. Cookie dough recipe of any kind (made from scratch, not store-bought mix)
 - *Peanut butter & sugar cookie dough make realistic fossil colors (Appendix 3-A)
 - * Dough recipe may need to be doubled or tripled depending on class size.
- 2. Ingredients for dough (will vary depending on recipe needs)
- 3. Measuring cups
- 4. Measuring spoons
- 5. Mixing bowl
- 6. Spatula
- 7. Hand mixer or large kitchen mixer
- 8. Cooking spray
- 9. Rubber gloves
- 10. Cookie mold or large candy molds (preferably no larger than 1-2" diameter)
- 11. Cookie sheet
- 12. Waxed paper- cut into small squares
- 13. Small zip-loc bags
- 14. Small permanent marker
- 15. Small food scale
- 16. Ruler
- 17. Cookie Dough Fossils Station (Appendix 3-B)

C. *Key Vocabulary*

- 1. "As the crow flies"- following specific directions to reach your goal or destination
- 2. mold fossil- a fossilized impression made in the substrate
- 3. cast fossil- formed when a mold is filled in.

D. *Procedures/Activities*

- 1. Teacher briefly reviews general measurement information from previous unit.
- 2. Teacher will write the saying "As the crow flies" on the board and ask the students to be thinking about the meaning of this saying and how it relates to measurement.
- 3. Teacher will lead class or small groups in measuring and mixing cookie dough.

4. Teacher will allow students to practice measuring and weighing ingredients and final cookie dough mixture.
5. Teacher will lead class in determining and dividing amount of cookie dough equally based on whole batch measurement &/or weight.
6. Students will place their dough portions into baggies to be refrigerated until their turn at the station
7. During station time, student will follow directions in creating a cast and mold fossil. (Appendix 3-B)

E. *Assessment/Evaluation*

1. Teacher will casually assess class recall of basic measurement during dough making process.
2. Teacher will assess fossil cookies before baking.
3. Students will create a Venn Diagram to compare/contrast cast and mold fossils.

Lesson Four: Healthy Heart or “Go to Pot”!

A. *Daily Objectives*

1. Concept Objective(s)
 - a. Students will organize information into various formats.
 - b. Students will engage in Hands-On Literacy Stations activities that integrate curriculum areas.
2. Lesson Content
 - a. *Core Knowledge Sequence* pp. 90, 104
 - b. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 81
 - c. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 326
3. Skill Objective(s)
 - a. Data collection through use of physical activity, pulse, and timing.
 - b. Transferring information from one format to another.
 - c. Applying knowledge to answer multi-step question

B. *Materials*

1. Stop watches – 1 per 2 students
2. Healthy Heart or “Go to Pot” Collecting Data Activities (Appendix 4-A)
3. Questions and Graphing Assessment – 1 per student (Appendix 4-B)

C. *Key Vocabulary*

1. “Go to pot” – a phrase to describe what happens to something when you don’t take care of it.
2. heart – a hollow muscular organ that by rhythmic contractions & relaxations keeps the blood in circulation throughout the body.
3. heart rate – a speeding up or slowing down of the heartbeat due to the amount of physical activity done
4. physical activity – the amount of movement or exercise a body does
5. pulse – the regular throbbing or beating of the arteries caused by the successive contractions of the heart.
6. Circulation – the continuous movement of blood through the heart and blood vessels

D. *Procedures/Activities*

1. Students review the function of the heart in the Circulatory System in a class discussion.
2. Teacher writes the following vocabulary on the white board: heart rate, pulse, & circulation.
3. Students define these words through prior knowledge or the use of a dictionary.
4. Teacher writes the words physical activity on the white board.
5. Students define it, and then explain the connection between physical activity and the group of words.
6. Teacher writes the saying “Go to pot” on the white board and asks students to guess the meaning. A clue could be the connection between the saying and all the other words.
7. Once it has been stated: If you don’t take care of your body it will weaken or “go to pot”. The teacher will tell the students that they are going to conduct an experiment that shows the connection between physical activity and a healthy heart/body.
8. Teacher assigns partners and distributes the materials.
9. Teacher explains that the group will conduct 2 of the activities as practice and demonstration of the procedures.
10. Students & teacher proceed to do activities 1 & 2 on the Collecting Data paper. (Appendix 4-A)
11. Teacher models the recording of the data and students record their own data. (Appendix 4-A)
12. Students are directed to complete the experiment with their partners during Literacy Stations.
13. Students will complete the Questions & Graphing Assessment using their recorded data individually.
14. Modification: Graph paper may be used for the Graphing Assessment.

E. *Assessment/Evaluation*

1. Student’s completed “Healthy Heart or Go to Pot” Collecting Data activity (Appendix 4-A)
2. Student’s completed Questions & Graphing Assessment (Appendix 4-B)
Enrichment Activity – Students create a poster demonstrating the need for a healthy heart.

Lesson Five: Geology “Through Thick and Thin”

A *Daily Objectives*

- 1 Concept Objective(s)
 - a. Students will organize information into various formats.
 - b. Students will engage in Hands-On Literacy Stations activities that integrate curriculum areas.
- 2 Lesson Content
 - a. *Core Knowledge Sequence* pp. 90, 105
 - b. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 84
 - c. *What Your 4th Grader Needs to Know* (E.D.Hirsch, Jr.) pp. 317, 345
- 3 Skill Objective(s)

- a. Review knowledge of rock layers of the Earth
- b. Demonstrate knowledge of rock layers by using various food items to create a model and diagram.
- c. Use model to demonstrate fault line and earthquake.

B Materials

- 1. White bread
- 2. Wheat bread
- 3. Pumpernickel bread
- 4. Rye bread
- 5. Creamy peanut butter
- 6. Chunky peanut butter
- 7. Marshmallow fluff
- 8. Raisins
- 9. Strawberry Jelly
- 10. Chocolate chips
- 11. Chopped pecans or walnuts
- 12. Dry oatmeal
- 13. Wheat cereal flakes
- 3. Granola cereal
- 4. Geology Station Sheet (Appendix 5-A)

C. Key Vocabulary

- 1. “Through Thick and Thin”- helping someone or being true to that person in good times and bad
- 2. igneous rock – a type of rock formed from molten rock (magma) that cooled
- 3. sedimentary rock- a type of rock formed when layers of sediment are pressed and cemented together over time
- 4. metamorphic- a rock that has been changed by heat or pressure into another kind of rock
- 5. earthquake- a sudden movement of the ground that happens when part of the earth’s crust suddenly shifts, usually at a fault line
- 6. fault line- a crack in the earth’s crust along which earthquakes can happen.

D. Procedures/Activities

- 1. Students will review previous studies of rock layers of the earth using personal notes and books provided.
- 2. Teacher will write the saying “Through thick and Thin” on the board and ask the students to be thinking about the meaning of this saying and how it relates to the rock layers.
- 3. Students will use station sheet (Appendix 5-A) to complete a drawn diagram and sandwich model of layers of the earth.
- 4. Students will demonstrate an earthquake/ layers of the earth shifting using s sandwich model.
- 5. Students will ask a peer or teacher (if available) to assess model and earthquake demonstration.
- 6. Students may use books on Rocks & Minerals to assist them with identifying the layers. (See Attachment 5-B)

E Assessment/Evaluation

- 1 Teacher will assess drawn model of rock layers of the earth and sandwich ingredients chosen to represent each layer.
- 2 Student peer or teacher will assess demonstration of earthquake using sandwich model.

VI. CULMINATING ACTIVITY

- A. In the culminating activity, the students will recognize the appropriate use of sayings and phrases in relation to the curriculum areas of study. The teacher will list the 5 sayings that were used in the title of each of the literacy stations. Students will follow directions for a homework project to create a booklet of sayings and illustrations at unit end. (Appendix 6-B)

VII. HANDOUTS/WORKSHEETS

Directions for Appendices

1. Appendix 1-A Tree Cookie Sample
2. Appendix 1-B American Revolution timeline
3. Appendix 1-C Events of the American Revolution
4. Appendix 1-D “On the Warpath” Station Activity
5. Appendix 1-E “On the Warpath” Grading Rubric
6. Appendix 1-F Tree Cookie Prompt
7. Appendix 2-A African Weaving web sites
8. Appendix 2-B African Vessel Weaving Station
9. Appendix 3-A Cookie Dough Recipes
10. Appendix 3-B Cookie Dough Fossil Stations
11. Appendix 4-A Healthy Heart Date Collection
12. Appendix 4-B Healthy Heart Questions & Graphing
13. Appendix 5-A Geology Station Sheet
14. Appendix 5-B Rocks & Minerals Resource List
15. Appendix 6-A Stations Checklist & Grading Rubric
16. Appendix 6-B Culminating Activity Project

VIII. BIBLIOGRAPHY

- A. E.D.Hirsch, Jr. (1992) *What Your 4th Grader Needs to Know*. Core Knowledge Publications, Inc.: Core Knowledge Foundation
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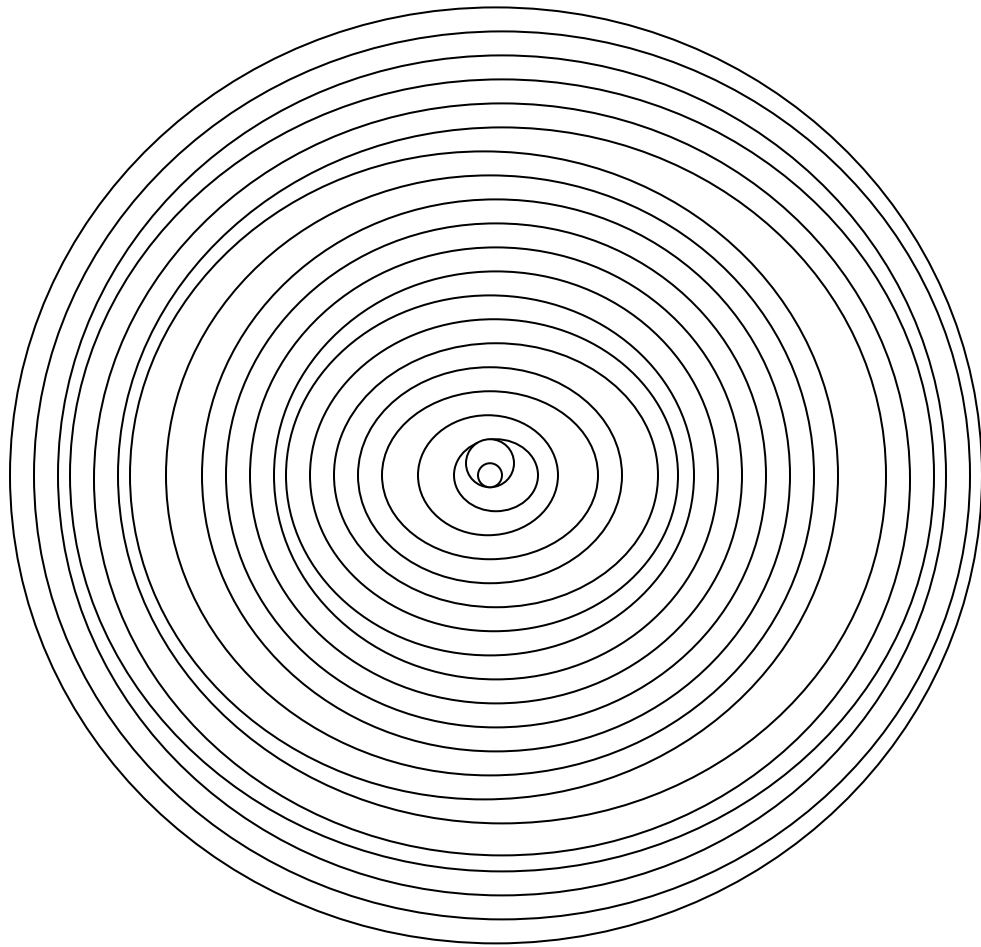
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- N. Simon, Seymour. (1996). *The Heart, Our Circulatory System* Morrow Junior Books. New York. ISBN 0-688-11407-5.
- O. Bingman, Caroline. (2003). *Human Body* DK Eye Wonder ISBN 0-7894-9044-7
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- Q. Kids Discover. (2002). *Rocks*. NY. ISSN 1054-2868
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- S. MacMillan/McGraw-Hill. (1995). *Earth Beneath your Feet*. New York. ISBN 0-02-276112-8/3
- T. Student individually recorded notes from subject notebooks

“Tree Cookie” Sample

“The Life of my Teacher”

List of Dates & Events

1. 1981 – Birth year
2. 1982
3. 1983 – Learned to walk
4. 1984
5. 1985
6. 1986 – Began Kindergarten
7. 1987
8. 1988 – Lost her first tooth
9. 1989 – Moved to a new house
10. 1990 – Began Grade 4
11. 1991
12. 1992
13. 1993 – Got a dog
14. 1994
15. 1995 – Started High School
16. 1996
17. 1997
18. 1998 – Graduation!
19. 1999 – Started college
20. 2000
21. 2001
22. 2002 – Graduation!
23. 2003 – Started teaching



*Number the rings that have events listed. Start with #1 in the center.

American Revolution Creating a Timeline

<u>Earliest Date</u>						<u>Latest Date</u>
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /

<u>Earliest Date</u>						<u>Latest Date</u>
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /

<u>Earliest Date</u>						<u>Latest Date</u>
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /

<u>Earliest Date</u>						<u>Latest Date</u>
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /
/ /	/ /	/ /	/ /	/ /	/ /	/ /



American Revolution Events

- 1763** The Proclamation of 1763 signed by King George III of England
1764 The Sugar Act / The Currency Act
1765 **March** The Stamp Act
May The Sons of Liberty
- 1770** The Boston Massacre
- 1773** The Tea Act (May) / Boston Tea Party (December)
1774 **First** Continental Congress meets in Philadelphia
1775 **February** Patrick Henry's Speech - "Give me Liberty or Give me Death!"
April 18 Paul Revere's famous ride - "The British are Coming!"
April 19 'shot heard round the world' begins the American Revolution
May Second Continental Congress meets in Philadelphia
June The Battle of Bunker Hill
July George Washington takes command of the Continental Army
- 1776** **April** North Carolina assembly's delegates in the Continental Congress
Vote for Independence from Britain
June America declares its independence from Britain
July 4 United States Declaration of Independence
December 25-26 George Washington crosses the Delaware

“On the Warpath” to the American Revolution Station Activity

- Use your knowledge of the American Revolution to create a timeline. This will serve as a rough draft or plan for your tree cookie project.
- Use at least 3 and no more than 5 resources to locate the events & their dates. (Yes, your personal notes are a resource!)
- Include at least 10 and no more than 15 events in chronological order on your timeline.
- Use your timeline to create a “tree cookie”. Follow the directions below:
 1. Determine the range of your dates. (I.e. latest date: 2006 – earliest date 1996 = 10 years.)
 2. Add one more year. (I.e. 10 years + 1 year = 11 years.)
 3. Draw a tree cookie with this number of rings. (I.e. 11 years = 11 rings.)
 4. Label the rings with the number of years you want it to represent beginning in the center. (I.e. #1 would be the center ring & #11 would be the outer most ring.)
 5. Next, match the #'s to the years in a list next to your tree cookie. (I.e. #1 – 1996, #2 – 1997, #3 – 1998, etc.)
 6. Write the events that you have next to the year that it happened. Remember that you may not have an event for every year. Leave those years blank. (I.e. #1 – 1996 – My sister was born
#2 – 1997
#3 – 1998 – She took her first steps.)
 7. Now circle the numbers on the tree cookie that represent the the years you have events for.
 8. Title and label your project.
 9. Proofread and correct errors in spelling, punctuation, & Capitalization.
 10. Put your name on your project!

“On the Warpath” to the American Revolution Grading Rubric

Project Checklist:

1. ___ Range of the dates was determined accurately.
2. ___ One more year was added.
3. ___ Tree cookie is drawn with correct number of rings.
4. ___ Rings are labeled with the number of years represented beginning in the center.
5. ___ Numbers & years are listed next to the tree cookie.
6. ___ Events are written next to the year that it happened. Years not represented were left blank.
7. ___ Numbers are circled on the tree cookie that represent the the years or the events listed.
8. ___ Project is titled and labeled.
9. ___ Project has been proofread for errors in spelling, punctuation, & capitalization.
10. ___ Name is on the project!

Grading Rubric:

A – Project includes all of the above. It is neatly done and includes accurate information.

B – Project includes most of the above. It is neatly done and includes accurate information. The only errors are in proofreading.

C – Project includes most of the above. Most of the information is accurate. There are possible errors in proofreading and/or it is not the student’s neatest work.

D – Project is incomplete, includes multiple errors in accuracy and/or proofreading. It is not the student’s neatest work.

F – Project has not been turned in.

Student name: _____ **signature** _____

Student grade: _____ **Comments:** _____

Teacher signature

Parent signature

Tree Cookie Prompt



A tree has fallen in the forest during the time of the American Revolution. The rings of the tree determines its age. A slice of the tree can be called a “tree cookie” Using your American Revolution time line, draw a tree cookie. The number of rings is determined by the range of the years. Once drawn, record the information from the time line onto the tree cookie.

African Weaving Web Sites

1. African Paper Weaving – www.thewalters.org/wcontent/files/pdfs/African_Paper_Weaving
2. Basic Tribal and Village Weaves – www.marlamallett.com/techniques.htm
3. West African Weaving – www.marlamallett.com/africa-books.htm
4. African Textile Art – www.princetonol.com/groups/iad/lesson/middle/studtext.htm
5. African Vessels – www.hamillgallery.com/SITE/vessels.htm

African Vessel Weaving Station

Materials:

- Pre-cut 8” wax coated paper cup
- 12 pieces of yarn, 1 yard in length
(3 colors; 4 pieces of each)

Directions:

1. You will begin with a cup that you have already begun weaving during the demonstration.
2. Your 2nd piece of yarn has already been tied and is tucked inside the cup.
3. Remove this piece and continue to weave using the *over, then under* method. (Make sure that you are going over or under one section at a time.)
4. When this piece has approximately 2” left, tie it to your next piece.
5. Continue to weave, repeating steps 3-4 until your cup has become a vessel. (The last piece should reach the brim of the cup.)
6. Periodically check your weave to make sure you are following your pattern. Also check the weave itself for accuracy in the *over, then under* method.
7. When your yarn has reached the brim, see the teacher to tie off the final piece.



Christmas Cutout Sugar Cookies

Recipe courtesy Lynn Krikorian

Recipe Summary

Difficulty: Easy

Prep Time: 40 minutes

Inactive Prep Time: 30 minutes

Cook Time: 10 minutes

Yield: 24 cookies

User Rating: ★★★★★

4 cups sifted all-purpose flour

2 teaspoons baking powder

1 1/2 cups sugar

2 eggs

3/4 cup butter (1 1/2 sticks)

2 teaspoons vanilla extract

Colored Icing, recipe follows

Preheat oven to 350 degrees F.

In a bowl, stir together flour and baking powder. In another bowl, beat butter with sugar until fluffy and light. Beat in eggs and vanilla. Stir in flour mixture, a third at a time, to make stiff dough. Divide dough into 4 pieces. Roll out a portion of cookie dough to 1/4 inch thick. Cut out shapes using cookie cutters. Place on lightly greased or nonstick cookie sheets. Bake until lightly golden, about 10 minute, rotating baking sheet halfway through cooking time. Cool completely on pans about 5 minutes, transfer to cooling racks.

Cookie Dough Fossils Station

*** Follow directions carefully to create your two cookie fossils. Before your cookies will be baked, your teacher must check them to assure accuracy.**

- 1 Review your science notes about fossils. Be sure you understand the difference between cast and mold fossils.
- 2 Review the equipment at your station. Think about how you will create an example of each fossil with the materials provided.
- 3 Wash hands.
- 4 Carefully put on latex gloves.
- 5 Take your dough ball from the baggie and knead it gently for a few minutes to warm it and make it pliable. If dough becomes sticky, ask your teacher to spray your gloves with a bit of cooking spray.
- 6 Use the cookie molds at your station to create your different fossils.
- 7 Place each “fossil” on a piece of waxed paper.
- 8 Remove your gloves and use the Sharpie marker to label each fossil (cast or mold) and put your name on each.
- 9 Show these examples to your teacher. If your cookie fossils are correct, place them on the cookie sheet (leave them on the waxed paper!) ready to be baked.
- 10 If all goes well, you will be able to enjoy your cookies at snack time this afternoon.
- 11 Create a Venn Diagram to compare/contrast cast and mold fossils. You may include written examples and/or illustrations.

Healthy Heart or “Go to Pot” Data Collection



My Name _____

My Partner _____

Before beginning the activity:

- *Practice using the stop watch*
- *Locate your pulse & practice counting the beats*
- *Decide who will go first for each activity.*

Directions:

Your partner will time you as you do the activity & then take your pulse. You will then time your partner as s/he does the activity & then takes his/her pulse. *Be sure to record you heart rate for each activity as soon as you finish counting & the minute is up.*

Activity #1

Sit perfectly still for one minute. Take your pulse for the next minute. Record you & your partner’s heart rate below.

My heart rate

My partner’s heart rate

Activity #2

Stand up, and then sit down repeatedly for one minute. Take your pulse for the next minute. Record you & your partner’s heart rate below.

My heart rate

My partner’s heart rate

Activity #3

Hop on one foot for a minute. Take your pulse for the next minute. Record you & your partner's heart rate below.

My heart rate

My partner's heart rate

Activity #4

Jog in place for one minute. Take your pulse for the next minute. Record you & your partner's heart rate below.

My heart rate

My partner's heart rate

Activity #5

Reach for the ceiling for one minute. Take your pulse for the next minute. Record you & your partner's heart rate below.

My heart rate

My partner's heart rate

Activity #6

Do jumping jacks for one minute. Take your pulse for the next minute. Record you & your partner's heart rate below.

My heart rate

My partner's heart rate

You have completed the data collection and the partnering portion of this station. Please return to your desk to complete the questions and graphing portion. You will do this part individually.

Healthy Heart or “Go to Pot” Questions & Graphing

My Name _____ My Partner’s Name _____

Answer the following questions using the data you collected during the 6 activities.

1. Which activity increased your heart rate the most? _____
2. Which activity increased your partner’s heart rate the most? _____
3. Compare you and your partner’s heart rates for these activities. Whose heart rate was the highest? _____.
4. What is the difference between the 2 heart rates? (Show your work.)

5. Compare your lowest heart rate to your highest. What is the difference?
(Show your work.)

6. Why do you think your heart reacted the way it did to these 2 activities? _____

7. Which activity was the most difficult for you to do? _____
8. What was your heart rate for this activity? _____
9. What comparison can you make between questions #7 and #8? _____

9. What comparison can you make between questions #7 and #8? _____

10. Who do you think is in better shape? _____ Explain. _____

*Use the back of this paper to design a double bar graph to explain your data.
Remember to label all the parts. Yes, you may use a ruler and coloring materials.
Be creative and have fun!*

Geology "Through Thick and Thin" Station Sheet

- Follow the directions below to create your "layers of rock" sandwich.
 - Use as many ingredients as you like, just remember that you are responsible for cleaning up after yourself! 😊
- 1 Take a few minutes to review your notes and drawings of the Earth's many layers of rock in your Science notebook. You may also want to review some of the texts and pamphlets at the station.
 - 2 Briefly preview all the sandwich supplies available to you.
 - 3 Draw and color a diagram of a section of canyon. Include at least 5 and no more than 8 rock layers. Label each layer with appropriate rock names.
 - 4 Choose the sandwich items to represent each rock layer in your diagram. Add these item names to your rock diagram illustration.
 - 5 Wash your hands. Put on latex gloves.
 - 6 Use the items available to make your best representation of your diagram. Create your sandwich of at least 5 and no more than 8 layers.
 - 7 Neatly replace and clean up your utensils and supplies.
 - 8 Use your plastic knife to cut a "fault line" in your sandwich.
 - 9 Use your sandwich parts to create a small earthquake.
 - 10 Quietly show another student at your station your sandwich earthquake and describe your rock layers. (Your teacher may check your earthquake too, so be prepared!)
 - 11 After you have completed your diagram (be sure your sandwich ingredients are included!) and cleaned up your materials, you may enjoy your rock layers sandwich!

Rocks & Minerals Resource List

1. Squire, Ann O. (2002). *A True Book: Rocks and Minerals*. Children's Press. ISBN 0-516-26985-2
2. Willis, Dr. Paul M.A. (1997) *My First Pocket Guide: Rocks and Minerals*. National Geographic Society. ISBN 0-7922-3448-0
3. Delta Science Readers: *Erosion*. (2004). ISBN 1-59242-523-2
4. Kids Discover: *Rocks*. (2002). ISSN 1054-2868

Appendix 6-A

"Saying" It Through Stations Checklist/ Grading Rubric

* Check off each assignment as you complete each task

Station 1

"On The War Path"

- Research completed
- "Tree Cookie" project completed

Station 2

- Completed African Vessel
- Optional: Illustrated/ Wrote about African Region
- Optional: Completed Diary Entry

Station 3

"As The Crow Flies" Through Measurement

- Participated in class measurement review/ dough making
- Created accurate dough fossils
- Completed Venn diagram comparing cast/mold fossils

Station 4

Healthy Heart or "Go To Pot"

- Completed Data Collecting Activities
- Questions completed
- Graphing assessment completed

Station 5

Geology "Through Thick and Thin"

- Diagram of rock layers (drawn & colored)
- Sandwich model of diagram created
- Fault line and earthquake demonstrated for peer or teacher
- Station area/materials cleaned up & tidy for next station participant

Teacher Grading Section

Station 1 _____ /20 pts

Station 2 _____ /20 pts

Station 3 _____ /20 pts

Station 4 _____ /20 pts

Station 5 _____ /20 pts

Total Points= _____

Teacher Comments/ Final Grade:

Appendix 6-A Continued

Cumulative Project

	Sayings listed/ defined
	Rough draft completed/ edited
	Booklet created with clear translations & illustrations
	Creative, colorful, neat project
	Included more than 5 required sayings

Station Culminating Activity At Home Project

Name: _____ **Project Due:** _____

* This project is to be completed AT HOME and INDEPENDENTLY. If you need materials, please ask your teacher. Otherwise, have FUN with this and make a product that makes you proud! 😊

Part 1

- 1 Review your station checklist. Each station you visited had a familiar saying as part of the station name.
- 2 List those sayings in your Literature Notebook. (look for the phrases in “parenthesis”)
- 3 Write a brief translation of each of those sayings. (You may review notes from our past discussions about sayings!)
- 4 Ask your teacher to check over your translations.

Part 2

- 1 After translations have been assessed and approved, create a booklet of these 5 sayings. (You may certainly include more sayings for extra credit!)
- 2 Include a clever illustration with each saying.
- 3 Begin with a rough draft outline of what each page will look like.
- 4 Ask at least 2 other people to edit your rough draft. Remind them to check for spelling, meaning and overall attractiveness. Be sure to listen carefully to what they suggest.
- 5 Use sturdy paper and eye-catching materials to create your final booklet. You may also use any other materials from home to assist with creativity.
- 6 Be sure each page has a colorful picture, saying and translation.
- 7 ***Be neat! Be creative! Create something colorful and eye-catching that makes you proud! 😊***