

OHIO ACADEMIC CONTENT STANDARDS AND INDICATORS

Ohio Department of Education: http://www.ode.state.oh.us/Academic_Content_Standards/acsmath.asp

Number, Number Sense and Operations

- 7** Recognize that division may be used to solve different types of problem situations and interpret the meanings of remainders: e.g., situations involving measurement, money
- 9** Estimate the results of computations involving whole numbers, fractions and decimals, using a variety of strategies.
- 13** Use a variety of methods and appropriate tools for computing with whole numbers; e.g., mental math, paper and pencil, and calculator.
- 14** Demonstrate fluency in adding and subtracting whole numbers and in multiplying and dividing whole numbers by 1- and 2-digit numbers and multiples of ten.

Measurement

- 2** Demonstrate and describe perimeter as surrounding and area as covering a two-dimensional shape, and volume as filling a three-dimensional object.

Geometry and Spatial Sense

- 2** Describe, classify, compare and model two- and three-dimensional objects using their attributes.
- 3** Identify similarities and differences of quadrilaterals; e.g., square, rectangles, parallelograms and trapezoids.

Data Analysis and Probability

- 12** Place events in order of likelihood and use a diagram or appropriate language to compare the chance of each event occurring; e.g., impossible, unlikely, equal, likely, certain.

ACTIVITIES

(See the resource listings below for Internet Resources, *Opening the Door West Plus!* Bonus Materials, and the WOUB/Shelburne Films DVD documentary *Opening the Door West* tie-ins to the activities.)

• Prices and Wages

- ▶ Use the information from the documentary and the bonus materials primary sources to learn about wages.
- ▶ Have the students calculate daily wages and yearly earnings. Visit the web page: *“How Much is That Worth Today”* to compare the buying power of money then and now.
 - Construction laborer – \$7.00 a month in 1789
 - Workers on first trip to the Ohio country in 1787 – 1788 • \$4.00 a month (to paid at journey’s end).
 - Rufus Putnam • \$40.00 a month in 1788
 - Rufus Putnam’s award to the widow of the murdered Indian • \$5.00 in 1797

• Fort Construction

- ▶ Build models of the fortifications by identifying the three-dimensional subsets of structures.
- ▶ Use the animations of the fortifications built by the settlers from the documentary and/or the bonus materials to initiate the study two- and three-dimensional objects.
 - Pentagonal Fort Harmer had pentagonal bastions at each vertex. The barracks were rectangular prisms, and barrack roofs were triangular prisms.
 - Campus Martius was built around a 144 square parade ground. It had rectangular and triangular prisms as well as other shapes.
 - Fort Frye had a roughly triangular shape while Farmer’s Castle was rectangular.

INTERNET RESOURCES

• Primary Sources in the Classroom: Sensitive Content

The problem of offensive content:

<http://www.wisconsinhistory.org/turningpoints/primarysources.asp#sensative>

• “How Much is That Worth Today?”

from Economic History Services. (This website was created in 2003 and has not been updated to show 2005 buying power.):

<http://www.eh.net/hmit/ppowerusd/>

• “Making ‘Cents’ of Colonial Money”:

<http://www.history.org/media/audio.cfm>

Scroll down the page to locate the audio clips. QuickTime required.

• Ohio Treasurer of State ▶ Kidzone downloads

<http://www.treasurer.state.oh.us/kidzone.htm>

- ▶ “Money & Me” virtual textbook
- ▶ The Ohio Treasury for Kids
- ▶ Money Related Links for Kids

• Geometric Architecture:

<http://www.lessonplanspage.com/MathArtGeometricArchitectureDeveloping46.htm>

WOUB/SHELBURNE FILMS DVD DOCUMENTARY *OPENING THE DOOR WEST*

CHAPTER	CHAPTER TITLE	START	DESCRIPTION
7	Adelphi	04:13	Economics - capitol, monthly wages for laborers, Rufus Putnam

BONUS MATERIALS

LOCATION	TITLE	SOURCE	LENGTH
DVD	<i>Campus Martius</i> by David Shelburne	computer animation	05:34
DVD	<i>Farmer's Castle</i> by David Shelburne	computer animation	01:48
DVD	<i>Fort Frye</i> by David Shelburne	computer animation	00:22
DVD	<i>Fort Harmar</i> by David Shelburne	computer animation	02:00
DVD	The Floating Mill by David Shelburne	computer animation	00:34
DVD	<i>The Point</i> by David Shelburne	computer animation	03:10
CD	Ohio Company Meeting - First Settlers	<i>Pioneer History</i>	1 page
CD	Compensation to Delaware Widow	Hildreth Collection Transcripts	1 page