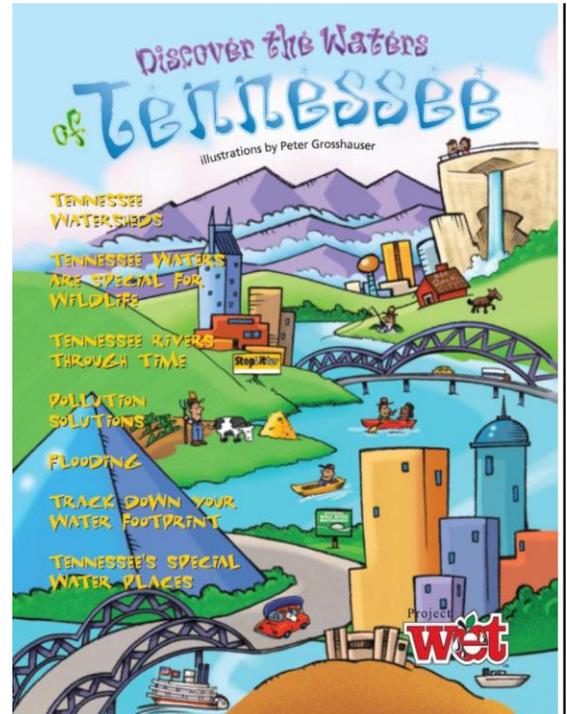


# Discover the Waters of Tennessee

## 4<sup>th</sup> GRADE CORRELATION TO STATE STANDARDS

“Tennessee Watersheds” pages

2, 3



<b>SCIENCE</b>	
Embedded Inquiry	GLE 0407.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data

**“Tennessee Waters are Special for Wildlife” pages 4, 5**

<b>SCIENCE</b>	
Embedded Inquiry	GLE 0407.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data
Life Science - Interdependence	<p>GLE 0407.2.1 Analyze the effects of changes in the environment on the stability of an ecosystem</p> <p><input checked="" type="checkbox"/> 0407.2.1 Analyze how an increase or decrease in competition or predation affects an ecosystem</p> <p>SPI 0407.2.1 Recognize the impact of predation and competition on an ecosystem</p>
Life Science – Flow of Matter and Energy	<p>GLE 0407.3.2 Investigate different ways that organisms meet their energy needs</p> <p><input checked="" type="checkbox"/> 0407.3.1 Create a food web that illustrates the energy relationships between plants and animals and the key issues or assumptions found in the model</p> <p><input checked="" type="checkbox"/> 0407.3.2 Classify organisms as carnivores, herbivores, or omnivores</p> <p><input checked="" type="checkbox"/> 0407.3.3 Identify how a variety of organisms meet their energy needs</p> <p>SPI 0407.3.1 Determine how different organisms function within an environment in terms of their location on an energy pyramid</p>
Life Science – Biodiversity and Change	<p>GLE 0407.5.1 Analyze physical and behavioral adaptations that enable organisms to survive in their environment</p> <p><input checked="" type="checkbox"/> 0407.5.1 Classify animals according to their physical adaptations for obtaining food, oxygen, and surviving within a particular environment</p> <p><input checked="" type="checkbox"/> 0407.5.2 Describe how animal behaviors such as migration, defense, means of locomotion, and hibernation enable them to survive in an environment</p> <p><input checked="" type="checkbox"/> 0407.5.3 Investigate tropisms that plants exhibit in response to changes in their environment</p> <p>SPI 0407.5.1 Determine how a physical or behavioral adaptation can enhance the chances of survival</p>

**“Tennessee Rivers through Time” pages 6, 7**

<b>SCIENCE</b>	
Life Science – Biodiversity and Change	GLE 0407.5.2 Describe how environmental changes caused the extinction of various plant and animal species <input checked="" type="checkbox"/> 0407.5.4 Gather fossil information to draw conclusions about organisms that exist today
<b>SOCIAL STUDIES</b>	
<b>Culture</b>	Culture encompasses similarities and differences among people including their beliefs, knowledge, changes, values, and traditions. Students will explore these elements of society to develop an appreciation and respect for the variety of human cultures.
Content Standard 1.0	<p>4.1.01 Understand the diversity of human cultures</p> <ul style="list-style-type: none"> <li>a. Describe cultures of Native American tribes</li> <li>b. Explain how European settlers created a new culture</li> </ul> <p>4.1.02 Discuss cultures and human patterns of places and regions of the world</p> <ul style="list-style-type: none"> <li>b. Compare how people from different cultures think about and handle their physical environments and social conditions</li> </ul> <p>4.1.03 Recognize the contributions of individuals and people of various ethnic, racial, religious, and socioeconomic groups to the development of civilizations</p> <p>4.1.04 Understand the contributions of individuals and people of various ethnic, racial, religious and socioeconomic groups to Tennessee</p> <ul style="list-style-type: none"> <li>a. Identify the similarities and differences within and among selected racial, ethnic and religious groups in Tennessee</li> <li>b. Identify customs, celebrations, and traditions of various cultures groups in early Tennessee</li> <li>c. Summarize the contributions of people of various racial, ethnic and religious groups to the development of early Tennessee</li> </ul> <p>4.1.spi.1 Identify pre-Colonial Native American groups</p> <p>4.1.spi.5 Identify various racial and ethnic groups in Tennessee at the founding of statehood</p> <p>4.1.tpi.1 Discover the story the early Tennessee settlers in the formation of the Wautaga settlement</p> <p>4.1.tpi.2 Discuss the importance of forts such as Fort Loudon in the development of the emerging Tennessee community and the lives of the soldiers</p> <p>4.1.tpi.7 Write or give an oral report about early American Spanish</p>

	<p>missions</p> <p>4.1.tpi.8 Create and/or perform a play based upon explorers coming to North America and meeting Native Americans</p>
--	---

<b>Economics</b>	<p>Globalization of the economy, the explosion of population growth, technological changes and international competition compel students to understand both personally and globally production, distribution, and consumption of goods and services. Students will examine and analyze economic concepts such as basic needs versus wants, using versus saving money and policy making versus decision making.</p>
Content Standard 2.0	<p>4.2.02 Give examples of the interaction of groups, businesses, and governments in a market economy</p> <ul style="list-style-type: none"> <li>a. Explain the economic patterns of various early Native American groups in Tennessee and the Western Hemisphere</li> <li>c. Explain the economic patterns of early European colonial governments and their relationships with foreign governments</li> </ul> <p>4.2.04 Understand the development of economics within Tennessee and early America</p> <ul style="list-style-type: none"> <li>a. Identify the economic motivations for European exploration and settlement in Tennessee and the Western Hemisphere</li> <li>b. Examine the location, distribution, and patterns of economic activities and of settlement in Tennessee</li> <li>c. Evaluation the effects of supply and demand on business, industry, and agriculture, including the plantation system, in Tennessee and various regions</li> </ul> <p>4.2.spi.2 Interpret a chart of major agricultural produce in Tennessee</p> <p>4.2.spi.5 Analyze the impact of European exploration and colonization on the economy of Tennessee</p>
<b>Geography</b>	<p>Geography enables the students to see, understand and appreciate the web of relationships between people, places, and environments. Students will use the knowledge, skills, and understanding of concepts within the six essential elements of geography: world in spatial terms, places and regions, physical systems, human systems, environment and society, and the uses of geography.</p>
Content Standard 3.0	<p>4.3.04 Understand the geographic factors that determined the</p>

	<p>locations of and patterns of settlements in Tennessee</p> <p>a. Explain how the patterns and processes of migration affect the development of Tennessee</p> <p>b. Explain how environmental issues such as water supply, air quality, and solid waste confronted humans when settling Tennessee</p> <p>4.3.spi.3 Recognize the reasons settlements are founded on major river systems</p>
--	--

**“Pollution Solution” pages 8, 9**

<b>SCIENCE</b>	
Embedded Inquiry	GLE 0407.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data
Life Science – Biodiversity and Change	<p>GLE 0407.5.2 .Describe how environmental changes caused the extinction of various plant and animal species</p> <p><input checked="" type="checkbox"/> 0407.5.5 Analyze the common causes of extinction and explain how human actions sometimes result in the extinction of a species</p>

**“Flooding” pages 10, 11**

<b>SCIENCE</b>	
Embedded Inquiry	<p>GLE 0407.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data</p> <p>GLE 0407.Inq.4. Identify and interpret simple patterns of evidence to communicate the findings of multiple investigations</p> <p><input checked="" type="checkbox"/> 0407.Inq.4 Analyze and communicate findings from multiple investigations of similar phenomena to reach a conclusion</p> <p>SPI 0407.Inq.1 Select an investigation that could be used to answer a specific question</p>
Life Science – Biodiversity and Change	<p>GLE 0407.5.2 Describe how environmental changes caused the extinction of various plant and animals species</p> <p><input checked="" type="checkbox"/> 0407.5.5 Analyze the common causes of extinction and explain how human actions sometimes result in the extinction of a species</p> <p>SPI 0407.5.2 Infer the possible reasons why a species became endangered or extinct</p>
<b>MATH</b>	
Strand 19: Tables, Graphs and Charts	<p>A. Identify correct information from tables, bar graphs, pictographs, and charts</p> <p>B. Create bar graphs and pictographs from data in tables and charts</p>
Strand 24: Classification and Logical Reasoning	<p>A. Solve logic, counting and classification problems involving the organization of data</p> <p>B. Sort or classify objects and draw logical conclusions from data including Venn diagrams and transitive reasoning questions</p>

## “Track Down Your Water Footprint” pages 12, 13

<b>SCIENCE</b>	
Embedded Inquiry	<p>GLE 0407.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data</p> <p>GLE 0407.Inq.3 Organize data into appropriate tables, graphs, drawings, or diagrams</p> <p><input checked="" type="checkbox"/> 0407.Inq.1 Identify specific investigations that could be used to answer a particular question and identify reasons for this choice</p> <p>SPI 0407.Inq.1 Select an investigation that could be used to answer a specific question</p>
Life Science – Biodiversity and Change	<p>GLE 0407.5.2 Describe how environmental changes caused the extinction of various plant and animals species</p> <p><input checked="" type="checkbox"/> 0407.5.5 Analyze the common causes of extinction and explain how human actions sometimes result in the extinction of a species</p> <p>SPI 0407.5.2 Infer the possible reasons why a species became endangered or extinct</p>
<b>MATH</b>	
Strand 19: Tables, Graphs and Charts	<p>A. Identify correct information from tables, bar graphs, pictographs, and charts</p> <p>B. Create bar graphs and pictographs from data in tables and charts</p>
Strand 24: Classification and Logical Reasoning	<p>A. Solve logic, counting and classification problems involving the organization of data</p> <p>B. Sort or classify objects and draw logical conclusions from data including Venn diagrams and transitive reasoning questions</p>

**Please:** share your feedback and reward your class with a Certificate of Completion!!



CONTACT: Cynthia Allen, [callen@mtsu.edu](mailto:callen@mtsu.edu), 615-898-2660,  
WaterWorks! Coordinator  
MTSU 's Center for Environmental Education

*Special thanks to Bonnie Ervin, Kathy DeWein and Michelle Rogers for their assistance correlating the standards.*