



River of Time
Teacher's Resource Packet

For use in conjunction with the River of Time program at the Public Museum of Grand Rapids, Michigan, and State of Michigan curriculum standards.

River of Time ***Teacher's Resource Packet Contents***

These resources have been designed to help teachers as they prepare to bring their classes to at the Public Museum of Grand Rapids, Michigan. Feel free to use the materials before or after your visit.

Pre-Visit Materials

- Michigan Department of Education Curriculum Links
- Vocabulary
 - Vocabulary List
 - Crossword Puzzle
- River of Time Book List
- *The Grand River* mapping project
 - *The Grand River: A Bicentennial History* narrative
 - Blank maps of Michigan

Post-Visit Materials

- *Art in the City* Group Activity
 - *The Perfect Community* Group Activity
 - *Creative Writing Prompts* Individual Writing Activity
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These materials cannot be reproduced for use beyond the classroom without the written consent of the Public Museum of Grand Rapids, Michigan.

Curriculum Links

The River of Time program is designed to fit with the curriculum standards of the Michigan Department of Education. The specific links covered are listed below.

History

- **3 – H3.0.1** Identify questions historians ask in examining the past in Michigan (e.g., What happened? When did it happen? Who was involved? How and why did it happen?)
- **3 – H3.0.10** Create a timeline to sequence early Michigan history (American Indians, exploration, settlement, statehood).
- **4 – H3.0.3** Describe how the relationship between the location of natural resources and the location of industries (after 1837) affected and continues to affect the location and growth of Michigan cities. (G, E)
- **4 – H3.0.5** Use visual data and informational text or primary accounts to compare a major Michigan economic activity today with that same or a related activity in the past. (E)
- **4 – H3.0.8** Describe past and current threats to Michigan’s natural resources; describe how Michigan worked in the past and continues to work today to protect its natural resources. (G, C, E)

Geography

- **3 – G1.0.1** Use cardinal directions (north, south, east, west) to describe the relative location of significant places in the immediate environment.
- **3 – G4.0.3** Describe some of the current movements of goods, people, jobs or information to, from, or within Michigan and explain reasons for the movements. (E)
- **4 – G4.0.2** Describe the impact of immigration to the United States on the cultural development of different places or regions of the United States (e.g., forms of shelter, language, food). (H)
- **4 – G5.0.1** Assess the positive and negative effects of human activities on the physical environment of the United States.

Civics

- **3 – C3.0.1** Distinguish between the roles of state and local government.

Economics

- **3 – E1.0.3** Analyze how Michigan’s location and natural resources influenced its economic development (e.g., how waterways and other natural resources have influenced economic activities such as mining, lumbering, automobile manufacturing, and furniture making). (H, G)
- **4 – E2.0.1** Explain how changes in the United States economy impact levels of employment and unemployment (e.g., changing demand for natural resources, changes in technology, changes in competition). (H)

Writing

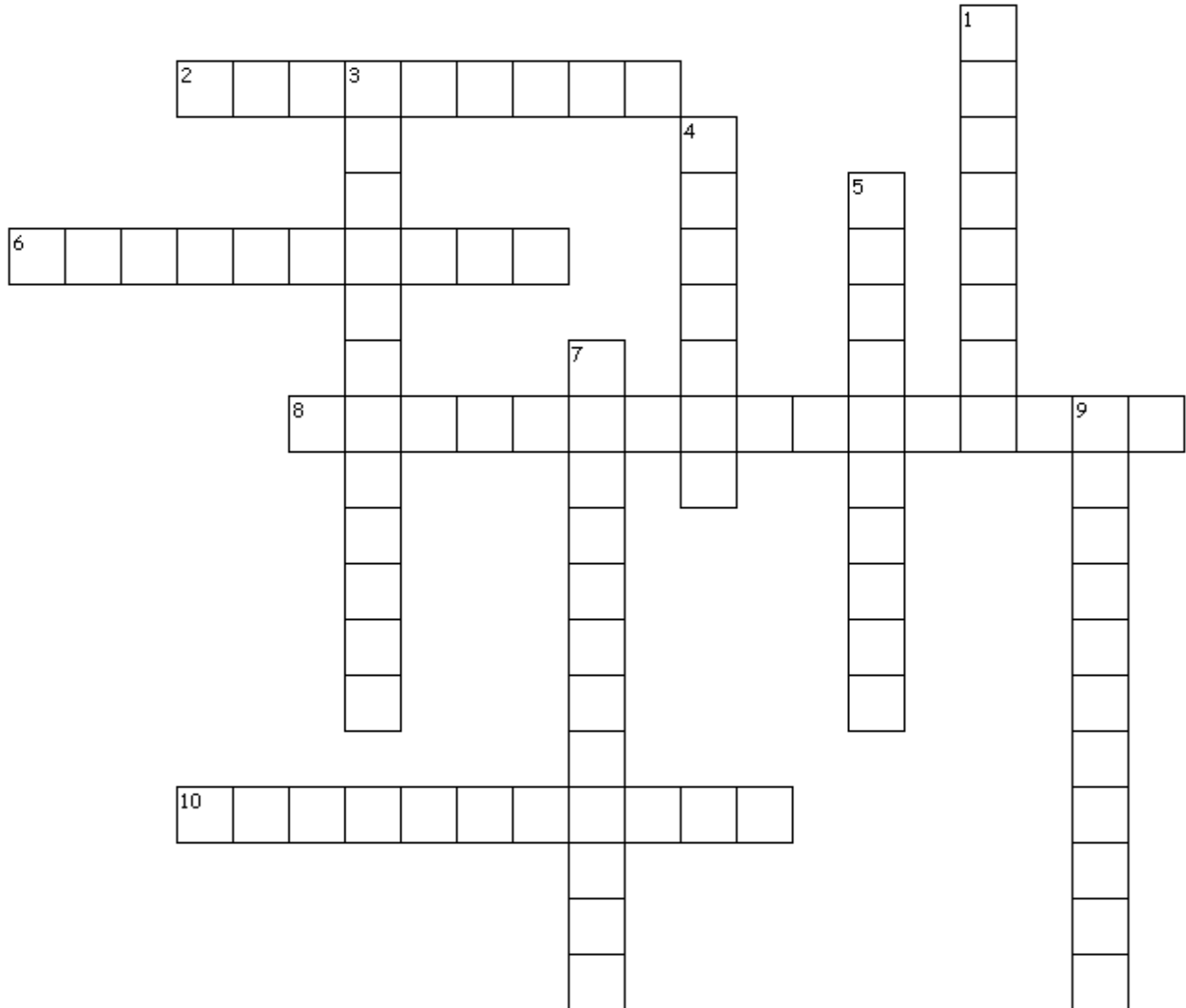
- **W.PS.05.01** exhibit personal style and voice to enhance the written message in both narrative (e.g., personification, humor, element of surprise) and informational writing (e.g., emotional appeal, strong opinion, credible support).

River of Time Vocabulary

Word	Meaning
1. Anishinabek	(a NISH eh NA bek) the people who lived in Western Michigan at the time the first Europeans came to America.
2. O-Wash-ta-nong	the faraway waters, Ottawa Indian name for the Grand River
3. Motu Viget	“strength through activity,” the city of Grand Rapids motto
4. sesquicentennial	a 150 th anniversary
5. bicentennial	a 200 th anniversary
6. lumberjack	a person who cuts or transports logs
7. river men	workers who rode cut logs down the river
8. glacier	a large body of ice moving slowly down a slope or over a wide area of land
9. skyscraper	a very tall building
10. urban renewal	revitalization of a core city area

River of Time Vocabulary

Directions: Use your vocabulary words and definitions to complete the puzzle.



Across

- 2. means "strength through activity," the city of Grand Rapids motto
- 6. a very tall building
- 8. a 150th anniversary
- 10. the faraway waters, the Ottawa Indian name for the Grand River

Down

- 1. workers who rode cut logs down the river
- 3. revitalization of a core city area
- 4. a large body of ice moving slowly down a slope or over a wide area of land
- 5. a person who cuts or transports logs
- 7. a 200th anniversary
- 9. the people who lived in Western Michigan at the time the first Europeans came to America

River of Time Book List

These are some recommended books for you to use to help supplement your classroom instruction about local history as you prepare for your field trip.

Author	Title	Publisher
Baxter, Albert	<i>History of the City of Grand Rapids, Michigan</i>	Grand Rapids Historical Society
Carron, Christian G.	<i>Grand Rapids Furniture, The Story of America's Furniture City</i>	Village Press Inc.
Elliot, Gerald	<i>Grand Rapids: The Renaissance on the Grand</i>	Continental Heritage Press
Harms, Richard H.	<i>Grand Rapids Goes to War: The 1940's Homefront</i>	Grand Rapids Historical Commission
Hendry, Fay	<i>Outdoor Sculpture in Grand Rapids</i>	Iota Press
Lydens, Z.Z.	<i>The Story of Grand Rapids</i>	Kregel Publishers
Mapes, Lynn	<i>Pictorial History of Grand Rapids</i>	Kregel Publishers
Olson, Gordon	<i>A Grand Rapids Sampler</i>	Grand Rapids Historical Commission
Olson, Gordon	<i>Grand Rapids a City Renewed: A History Since World Ware II</i>	Grand Rapids Historical Commission
VanVulpen, James	<i>Grand Rapids Then and Now</i>	Grand Rapids Historical Commission

The Grand River

- **Objectives**
 - Students will plot the course of the Grand River on the enclosed map. Important river towns and landforms will be indicated on the map.
 - Students will list important uses, both modern and historic, of the Grand River.
 - Students will list possible pollutants and sources of pollutants and discuss the impact of polluted water on the environment.
- **Materials:** Blank map of Michigan and narrative about the Grand River

Background Information

The Grand River is the longest river in Michigan. It flows through many cities, large and small. It also flows through farmlands, forests and fields.

Procedure

1. Trace the route of the Grand River using the river route map, the narrative and the blank map of Michigan provided in the packet. (Michigan maps are available free from the West Michigan Tourist Association.)
2. Based on their map and the narrative about the Grand River, have students brainstorm and come up with a list of possible uses (historic and modern) for the Grand River.
3. Have students list possible pollutants and sources of pollutants in the Grand River. Discuss impact of polluted water on the environment.
4. Direct group discussion exploring water quality issues which include:
 - Sources of our drinking water
 - Uses of water
 - The impact of wastewater on our rivers and lakes

The Grand River – A Bicentennial History

Exerpt from *The Story of the Grand River* written by Don Chrysler in 1975 pages 2 and 3.

Introduction

In Sommerset Township, about ten miles south of Jackson, Michigan, a bubbling spring creates a small stream, neat within its banks and narrow enough to step across. If you were to do so, you would be straddling the source of the Grand, Michigan's longest river. Running 270 miles to Grand Haven, its waters empty into Lake Michigan.

Trickling into pretty Lake Lee Ann, the stream joins forces with many other springs; the springs are nature's contribution, the lake is modern man's.

Flowing over the Lee Ann dam, the narrow stream passes into Grand Lake, two miles north of Sommerset Center. From Grand Lake, the stream meanders northward about 18 miles, passing directly through the heart of Jackson. It was at this point the early settlers arriving from the East through Detroit placed their families and earthly goods on rafts, heading downstream to Ionia, Grand Rapids and other locations along the river.

A few miles north of Jackson, the Grand is increased by the waters of the Portage River, then continues north to Lansing where the Red Cedar joins the Looking Glass River and adds its waters to the growing Grand. Approximately ten miles north of Portland, near Muir, the Maple River is added.

From the Lyons-Muir area, the Grand flows westward through Ionia and Lowell, where Flat River waters become part of the long river. Continuing on in the same direction to Ada, the Grand is joined by the Thornapple River. It then makes a large curve north of the city of Grand Rapids into Plainfield township. It is at this point that the Rogue River enters the Grand.

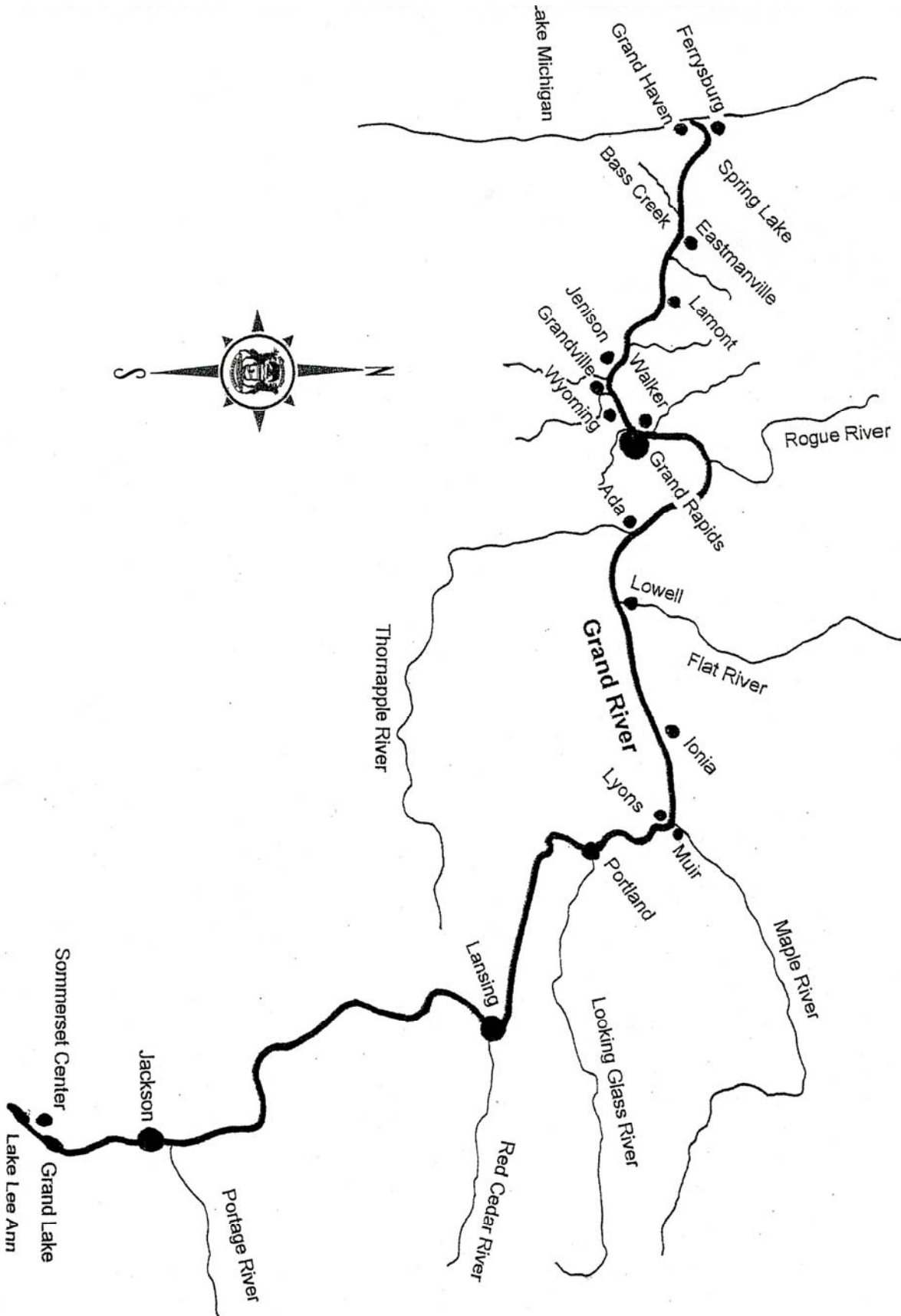
From Plainfield, the river turns south through Comstock Park, North Park, Walker and Grand Rapids. Between Comstock Park and Grand Rapids, Mill Creek and Indian Mill Creek enter from the west. As it leaves Grand Rapids in a southwesterly direction, it picks up Plaster Creek, passes Wyoming, the southern part of Walker, then around the bend at Grandville and Jenison. Buck Creek and Rush Creek both enter the Grand in this area.

From Jenison, the Grand once again turns in a northwesterly direction to pass Lamont and Eastmanville. Between these two villages, Sand Creek also joins the river from the north. A few miles down stream from Eastmanville, Bass Creek comes in from the south.

Crockery Creek is the last tributary to join the Grand. This mighty river then flows past Spring Lake, Ferrysburg and finally empties its waters into Lake Michigan at Grand Haven.



**The Lower Peninsula
of Michigan**



Art in the City

- **Objective:** Students will explore art as a part of their community and environment through examining art in Grand Rapids.
- **Materials:** Necessary art supplies depending on the project chosen by students.

Background Information

Artist Alexander Calder created the sculpture “La Grand Vitesse” for the plaza surrounding the city of and county buildings in Grand Rapids. It has become a symbol for the city of Grand Rapids. La grand vitesse translates from French to “the great swiftness.” Mr. Calder visited the city of Grand Rapids before he designed the sculpture; he saw the strength of the city and learned of the impact the river made on the city throughout history. His design reflects the theme.

Procedure

1. Divide the students into groups to have them create a piece of art that represents your classroom.
2. Have the students consider the following when creating their design:
 - Should it be two-dimensional or three-dimensional?
 - Should it be an abstract or realistic design?
 - What theme or themes do you want the piece to reflect?
 - Do you want a design you can reproduce?
 - Where will the final produce be displayed?
 - How will you used symbolism?
 - Will you name your final produce or not? If so, what will you name it?
3. Give the groups time to prepare their designs and products and show to the rest of the class.
4. Individual groups should explain the reasons for different aspects of the design (example, why they wanted it to be three-dimensional or what it is a symbol for).

The Perfect Community

- **Objective:** Students will have an opportunity to examine what services, facilities, laws and organizations create a better community.
- **Materials:** Art supplies to diagram the students' communities

Procedure

1. Discuss with the students different issues of communities including the following:
 - Laws and rules
 - Availability of natural resources
 - Essential services (fire and police protection, schools, health facilities, etc.)
 - Proximity to and relationship with environmental features
2. Divide the students into small groups to work together on their community project.
3. Give the students the following things to complete within their group:
 - Compose a common definition of "community"
 - List essential services, resources, rules and organizations for the perfect community
 - Create a model or map of their communities (must incorporate the elements of community already identified by the group)

Creative Writing Prompts

- **Objective:** Students will explore different aspect of Grand Rapids history creatively through writing projects.
- **Materials:** None

Possible Topics

- Pretend you are a settler or fur trader visiting Louis Campau. Write a journal entry about what you would see in Grand Rapids during your visit.
- Pretend you are a newspaper journalist on July 23, 1883 and have to report on the log jam. Write a paragraph about what the people would have seen and heard when the log jam broke free.
- Pretend you are one of the Anishinabek living in Grand Rapids when the first Europeans settlers come through. Write about your initial reactions to the presence of new settlers in town.