



America's Greatest History Attraction

CURRICULUM CONNECTIONS

George Washington Carver Educator Guide & Resources

(<http://www.thehenryford.org/education/erb/CarverEdGuide&THFResources.pdf>)

Educator Guide for George Washington Carver traveling exhibit, at Henry Ford Museum Nov. 2010 - Feb. 2011 as well as permanent resources available at The Henry Ford. Even separate from the exhibit, it contains useful background information, guiding questions, and suggested activities. Produced by the Field Museum and adapted by The Henry Ford.

Michigan Science Grade Level Content Expectations

Grade 2

S.RS.02.16 Identify technology used in everyday life.

Grade 3

S.RS.03.19 Describe how people have contributed to science throughout history and across cultures.

S.RS.03.18 Describe the effect humans and other organisms have on the balance of the natural world.

S.RS.03.16 Identify technology used in everyday life.

E.ES.03.52 Describe helpful or harmful effects of humans on the environment (garbage, habitat destruction, land management, renewable, and non-renewable resources).

E.ES.03.42 Classify renewable (fresh water, fertile soil, forests) and non-renewable (fuels, metals) resources.

E.ES.03.43 Describe ways humans are protecting, extending, and restoring resources (recycle, reuse, reduce, renewal).

Grade 4

S.RS.04.16 Identify technology used in everyday life.

S.RS.04.18 Describe the effect humans and other organisms have on the balance of the natural world.

S.RS.04.19 Describe how people have contributed to science throughout history and across cultures.

E.ST.04.31 Explain how fossils provide evidence of the history of the Earth.

Grade 5

S.RS.05.17 Describe the effect humans and other organisms have on the balance in the natural world.

S.RS.05.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.

Grade 6

S.RS.06.17 Describe the effect humans and other organisms have on the balance of the

natural world.
S.RS.06.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.

Grade 7

S.RS.07.17 Describe the effect humans and other organisms have on the balance of the natural world.

S.RS.07.19 Describe how science and technology have advanced because of the contributions of many people throughout history and across cultures.

Michigan Social Studies Grade Level Content Expectations

Grade 1

H2.0.4 Retell in sequence important ideas and details from stories about families or schools.

H2.0.5 Use historical records and artifacts (e.g., photos, diaries, oral histories, and videos) to draw possible conclusions about family or school life in the past.

H2.0.6 Compare life today with life in the past using the criteria of family, school, jobs, or communication.

G5.0.1 Describe ways in which people modify (e.g., cutting down trees, building roads) and adapt to the environment (e.g., clothing, housing, transportation).

Grade 2

H2.0.3 Use an example to describe the role of the individual in creating history.

Grade 4

G4.0.1 Use a case study or story about migration within or to the United States to identify push and pull factors (why they left, why they came) that influenced the migration.

G5.0.1 Assess the positive and negative effects of human activities on the physical environment of the United States.

Grade 6

H1.2.5 Identify the role of the individual in history and the significance of one person's ideas.

G4.2.1 List and describe the advantages and disadvantages of different technologies used to move people, products, and ideas throughout the world (e.g., call centers in the Eastern Hemisphere that service the Western Hemisphere; the United States and Canada as hubs for the Internet; transport of people and perishable products; and the spread of individuals' ideas as voice and image messages on electronic networks such as the Internet).

G5.1.1 Describe the environmental effects of human action on the atmosphere (air), biosphere (people, animals, and plants), lithosphere (soil), and hydrosphere (water) (e.g., changes in the tropical forest environments in Brazil, Peru, and Costa Rica).

G5.2.1 Describe the effects that a change in the physical environment could have on human activities and the choices people would have to make in adjusting to the change (e.g., drought in northern Mexico, disappearance of forest vegetation in the Amazon, natural hazards and disasters from volcanic eruptions in Central America and the Caribbean and earthquakes in Mexico City and Colombia).

Grade 8

- U4.2.2** The Institution of Slavery – Explain the ideology of the institution of slavery, its policies, and consequences.
- U5.1.1** Explain the differences in the lives of free blacks (including those who escaped from slavery) with the lives of free whites and enslaved peoples.
- U5.2.5** Construct generalizations about how the war affected combatants, civilians (including the role of women), the physical environment, and the future of warfare, including technological developments.
- U5.3.2** Describe the early responses to the end of the Civil War by describing the
- policies of the Freedmen’s Bureau
 - restrictions placed on the rights and opportunities of freedmen, including racial segregation and Black Codes
- U5.3.3** Describe the new role of African Americans in local, state and federal government in the years after the Civil War and the resistance of Southern whites to this change, including the Ku Klux Klan.
- U6.1.1** America at Century’s End – Compare and contrast the United States in 1800 with the United States in 1898 focusing on similarities and differences in
- territory, including the size of the United States and land use
 - population, including immigration, reactions to immigrants, and the changing demographic structure of rural and urban America
 - systems of transportation (canals and railroads, including the Transcontinental Railroad), and their impact on the economy and society
 - governmental policies promoting economic development (e.g., tariffs, banking, land grants and mineral rights, the Homestead Act)
 - economic change, including industrialization, increased global competition, and their impact on conditions of farmers and industrial workers
 - the treatment of African Americans, including the rise of segregation in the South as endorsed by the Supreme Court’s decision in *Plessy v. Ferguson*, and the response of African Americans
 - the policies toward American Indians, including removal, reservations, the Dawes Act of 1887, and the response of American Indians

Michigan English Language Arts Grade Level Content Expectations

Grade 1

- R.CM.01.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- W.GN.01.03** Write an informational piece that addresses a focus question (e.g., What is a family?) using descriptive, enumerative, or sequence patterns that may include headings, titles, labels, photographs, or illustrations to enhance the understanding of central ideas.
- S.DS.01.03** Respond to multiple text types by reflecting, making meaning, and making connections.
- L.RP.01.01** Listen to or view knowledgeably and discuss a variety of genre.
- L.RP.01.03** Respond to multiple text types listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to reflect, make meaning, and make connections.

Grade 2

- R.CM.02.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- W.GN.02.03** Write an informational piece including a magazine feature article using an organizational pattern such as description, enumeration, sequence, or compare/contrast that may include graphs, diagrams, or charts to enhance the understanding of central and key ideas.
- W.GN.02.04** Use the writing process to produce and present a research project; develop two research questions related to a teacher-selected topic; gather electronic or print resources and organize the information using key ideas with teacher assistance.
- S.DS.02.03** Respond to multiple text types by reflecting, making connections, taking a position, and/or showing understanding.
- L.RP.02.01** Listen to or view knowledgeably and discuss a variety of genre.
- L.RP.02.03** Respond to multiple text types listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to reflect, make connections, take a position, and/or show understanding.

Grade 3

- R.CM.03.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- W.GN.03.03** Write an informational piece including a report that demonstrates the understanding of central ideas and supporting details using an effective organizational pattern (e.g., compare/contrast, cause/effect, problem/solution) with a title, heading, subheading, and a table of contents.
- W.GN.03.04** Use the writing process to produce and present a research project; initiate research questions from content area text from a teacher-selected topic; and use a variety of resources to gather and organize information.
- S.DS.03.03** Respond to multiple text types by reflecting, making connections, taking a position, and/or showing understanding.
- S.DS.03.04** Plan and deliver presentations using an effective informational organizational pattern (e.g., descriptive, problem/solution, cause/effect); supportive facts and details reflecting a variety of resources; and varying the pace for effect.
- L.RP.03.01** Listen to or view knowledgeably and discuss a variety of genre and compare their responses to those of their peers.
- L.RP.03.03** Respond to multiple text types listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to reflect, make connections, take a position, and/or show understanding.

Grade 4

- R.CM.04.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- W.GN.04.03** Write an informational comparative piece that demonstrates understanding of central and supporting ideas using an effective organizational pattern (e.g., compare/contrast) and informational text features.
- W.GN.04.04** Use the writing process to produce and present a research project using a teacher-approved topic; find and narrow research questions; use a variety of resources; take notes; and organize relevant information to draw conclusions.
- S.DS.04.03** Respond to multiple text types by reflecting, making connections, taking a position, and/or showing deep understanding.

- S.DS.04.04** Plan and deliver presentations focusing on a key question using an informational organizational pattern (e.g., descriptive, problem/solution, cause/effect); supportive facts and details reflecting and emphasizing facial expressions, hand gestures, and body language.
- L.RP.04.01** Listen to or view knowledgeably and discuss a variety of genre and compare their responses to those of their peers.
- L.RP.04.03** Respond to multiple text types listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to clarify meaning, make connections, take a position, and/or show deep understanding.

Grade 5

- R.CM.05.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- W.GN.05.04** Use the writing process to produce and present a research project; use a variety of resources to gather and organize relevant information into central ideas and supporting details for a teacher-approved narrowed focus question and hypothesis.
- S.DS.05.03** Respond to multiple text types by analyzing content, interpreting the message, and evaluating the purpose.
- S.DS.05.04** Plan and deliver persuasive presentations or reports using an informational organizational pattern for a specific purpose (e.g., to persuade, describe, inform) that conveys and supports the point they want to make, while varying voice modulation, volume, and pace of speech to emphasize meaning.
- L.RP.05.01** Listen to or view knowledgeably and discuss a variety of genre and compare their responses to those of their peers.
- L.RP.05.03** Respond to multiple text types listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to clarify meaning, make connections, take a position, and/or show deep understanding without major misconceptions.

Grade 6

- R.CM.06.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- W.GN.06.03** Formulate research questions using multiple resources and perspectives that allow them to organize, analyze, and explore problems and pose solutions that culminate in a final presented project using the writing process.
- S.DS.06.02** Respond to multiple text types in order to compare/contrast ideas, form, and style; to evaluate quality; take a stand and support an issue; and to identify personally with a universal theme.
- S.DS.06.04** Plan a focused and coherent informational presentation using an informational organizational pattern (e.g., problem/solution, sequence); select a focus question to address and organize the message to ensure that it matches the intent and the audience to which it will be delivered.
- L.RP.06.01** Listen to or view knowledgeably a variety of genre to summarize, take notes on key points, and ask clarifying questions.
- L.RP.06.05** Respond to multiple text types when listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to compare/contrast similarities and differences in idea, form, and style to evaluate quality and to identify personal and universal themes.

Grade 7

- R.CM.07.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- W.GN.07.02** Write a research report using a wide variety of resources that includes appropriate organizational patterns (e.g., position statement/supporting evidence, problem statement/solution, or compare/contrast), descriptive language, and informational text features.
- S.DS.07.02** Respond to multiple text types in order to anticipate and answer questions, offer opinions and solutions, and to identify personally with a universal theme.
- S.DS.07.04** Plan and deliver a focused, coherent informational presentation using an informational organizational pattern (e.g., theory/evidence, persuasion, sequence) that incorporates persuasive, non-verbal techniques, and provides explanations and descriptions supportive of the presentation's focus and the backgrounds and interests of the audience.
- L.RP.07.05** Respond to multiple text types when listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to anticipate and answer questions; determine personal and universal themes; and offer opinions or solutions.

Grade 8

- R.CM.08.04** Apply significant knowledge from grade-level science, social studies, and mathematics texts.
- S.DS.08.02** Respond to multiple text types in order to explore problems and pose solutions supported with evidence, take a stand on an issue and support it, and identify personally with a universal theme.
- L.RP.08.05** Respond to multiple text types when listened to or viewed knowledgeably, by discussing, illustrating, and/or writing in order to anticipate and answer questions; determine personal and universal themes; and offer opinions or solutions.

Michigan Science High School Content Expectations

Earth Science

- E1.2k** Analyze how science and society interact from a historical, political, economic, or social perspective.
- E2.3c** Explain how the nitrogen cycle is part of the Earth system.
- E2.3d** Explain how carbon moves through the Earth system (including the geosphere) and how it may benefit (e.g., improve soils for agriculture) or harm (e.g., act as a pollutant) society.
- E2.4B** Explain how the impact of human activities on the environment (e.g., deforestation, air pollution, coral reef destruction) can be understood through the analysis of interactions between the four Earth systems.

Michigan Social Studies High School Content Expectations

United States History & Geography

- 6.3.1** Social Issues – Describe at least three significant problems or issues created by America's industrial and urban transformation between 1895 and 1930 (e.g., urban and rural poverty and blight, child labor, immigration, political corruption, public health, poor working conditions, and monopolies).

- 6.3.2** Causes and Consequences of Progressive Reform – Analyze the causes, consequences, and limitations of Progressive reform in the following areas
- major changes in the Constitution, including 16th, 17th, 18th, and 19th Amendments
 - new regulatory legislation (e.g., Pure Food and Drug Act, Sherman and Clayton Anti-Trust Acts)
 - the Supreme Court’s role in supporting or slowing reform
 - role of reform organizations, movements and individuals in promoting change (e.g., Women’s Christian Temperance Union, settlement house movement, conservation movement, and the National Association for the Advancement of Colored People, Jane Addams, Carrie Chapman Catt, Eugene Debs, W.E.B. DuBois, Upton Sinclair, Ida Tarbell)
 - efforts to expand and restrict the practices of democracy as reflected in post-Civil War struggles of African Americans and immigrants

Michigan English Language Arts High School Content Expectations

Writing, Speaking and Visual Expression

- CE 1.3.1** Compose written, spoken, and/or multimedia compositions in a range of genres (e.g., personal narrative, biography, poem, fiction, drama, creative nonfiction, summary, literary analysis essay, research report, or work-related text): pieces that serve a variety of purposes (e.g., expressive, informative, creative, and persuasive) and that use a variety of organizational patterns (e.g., autobiography, free verse, dialogue, comparison/contrast, definition, or cause and effect).

Reading, Listening and Viewing

- CE 2.1.7** Demonstrate understanding of written, spoken, or visual information by restating, paraphrasing, summarizing, critiquing, or composing a personal response; distinguish between a summary and a critique.
- CE 2.3.4** Critically interpret primary and secondary research-related documents (e.g., historical and government documents, newspapers, critical and technical articles, and subject-specific books).

Michigan Career and Employability Skills Standards

Strands

- 2** All students will acquire, organize, interpret, and evaluate information from career awareness and exploration activities, career assessment, and work-based experiences to identify and to pursue their career goals.

National United States History Content Standards 5-12: Eras

- Era 5:** Civil War and reconstruction (1850 to 1877)
Era 6: The development of the industrial United States (1870 to 1900)
Era 7: The emergence of modern America (1890 to 1930)
Era 8: The Great Depression and World War II (1929 to 1945)

National English Language Arts Content Standards

- 1** Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
- 5** Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.
- 7** Students conduct research on issues and interests by generating ideas and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.