

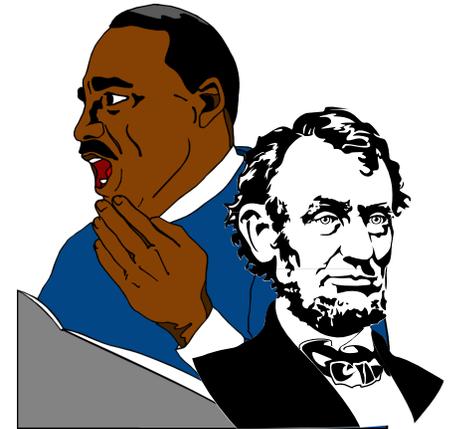
Famous Historic Figures

Background: You have been assigned to read a biography or an autobiography of an important person in American history. Follow your teacher's directions about taking notes as you read. You will use your notes to help you complete the challenge below.

Design Challenge: Design and create a special card that will help you and your classmates remember important facts about your person. Your closed card should be no smaller than 7 x 9 inches. The shape and appearance of the card should reflect the individual about whom you read. The title and name of the author of the book should be on the front of your card. You must include a lever-operated moving part and a pop-up inside your card. The person's name, dates of birth and death, and five pertinent facts about the person must be displayed on or inside your card.

Criteria: Your card must

- be no smaller than 7" x 9"
- have a shape and appearance that reflects the historic person and the person's time in history
- have the book's title and author's name on the front
- have a lever-operated moving part
- have a pop-up inside
- include the historic person's name and dates of birth and death
- display five pertinent facts about the historic person on the front or inside.



<p>Materials: Select from the list below.</p>	<p>Tools: Select from the list below.</p>
<ul style="list-style-type: none"> • card stock • construction paper • glue • paper clips • paper fasteners • poster board • scrap paper 	<ul style="list-style-type: none"> • computer • crayons/colored pencils • pencil • pushpin • paper drill • ruler • scissors

Targeted Standard of Learning: English 3.6
 Supporting SOL: English 3.2, 3.4; History and Social Science 3.3, 3.11;
 Mathematics 3.14; Science 3.2

Targeted Standard for Technological Literacy: 9
 Supporting STL: 8, 11

Tips for Teachers

Targeted Standard of Learning:

- English 3.6 The student will continue to read and demonstrate comprehension of nonfiction texts.
- a) Identify the author’s purpose.
 - b) Use prior and background knowledge as context for new learning.
 - c) Preview and use text features.
 - d) Ask and answer questions about what is read.
 - e) Draw conclusions based on text.
 - f) Summarize major points found in nonfiction texts.
 - g) Identify the main idea.
 - h) Identify supporting details.
 - i) Compare and contrast the characteristics of biographies and autobiographies.
 - j) Use reading strategies to monitor comprehension throughout the reading process.
 - k) Identify new information gained from reading.
 - l) Read with fluency and accuracy.

Supporting SOL: English 3.2, 3.4; History and Social Science 3.3, 3.11; Mathematics 3.14; Science 3.2

Targeted Standard for Technological Literacy:

- 9 Students will develop an understanding of engineering design.

Supporting STL: 8, 11

Tips for Teachers, continued

Prior Knowledge & Skill	Materials & Preparation	Safety Issues	Class Management	Materials Provided	Design Process
<ul style="list-style-type: none"> • Targeted English Standard of Learning 3.6 • Exposure to the design process • Exposure to simple machines (Science Standard of Learning 3.2) • Exposure to creating pop-ups 	<ul style="list-style-type: none"> • List names of historic figures: Powhatan, Pocahontas, George Washington, Betsy Ross, Abraham Lincoln, Benjamin Franklin, George Washington Carver, Eleanor Roosevelt, Susan B. Anthony, Helen Keller, Jackie Robinson, Martin Luther King, Jr., Christopher Columbus, Juan Ponce de Leon, Jacques Cartier, Christopher Newport, Thomas Jefferson, Rosa Parks, Thurgood Marshall, and Cesar Chavez. • Check Design Brief for recommended materials. Teacher may substitute materials. 	<ul style="list-style-type: none"> • Discuss proper use of tools. 	<ul style="list-style-type: none"> • Each student makes own card. • Each student keeps own Guided Portfolio. • Students reading about same person may work in a small group as long as each student completes own card and portfolio. 	<ul style="list-style-type: none"> • Design Brief • Guided Portfolio (adapt as appropriate/ optional) • Rubric Assessments • KWL chart 	<p>Follow the Design Process:</p> <ul style="list-style-type: none"> • Restate the problem. • Brainstorm solutions. • Create the best solution. • Test the solution. • Evaluate the solution.

Guided Portfolio, p2

Name _____



2. Brainstorm solutions. Sketch and/or describe some possible solutions.

Name _____

4. Test your solution.

Is your card at least 7 by 9 inches? YES NO

- What is the height of your card? _____ What is the width of your card? _____

Does the card's shape and appearance reflect the individual about whom you read? YES NO

- Explain how.

Is the book's title and author's name on the front of your card? YES NO

- Point out both the title and the author's name.

Does your card have a lever-operated moving part inside? YES NO

- Identify the mechanism, and explain how it works.

Does your card have a pop-up feature inside? YES NO

- Identify the pop-up, and explain how it works.

Does your card include the historic person's name and dates of birth and death? YES NO

- Date of birth: _____ Date of death: _____

Does your card include five pertinent facts about the person on the front or inside? YES NO

- Identify each fact.

Guided Portfolio, p5

Name _____

5. Evaluate your solution.

Was it the best solution? Why, or why not?

Look back at your brainstorming page. Would one of your other ideas have been better? Explain your reasoning.

What did you learn by designing and creating this card?

Name _____

KWL: Famous Historic Figures

Note: The teacher should make sure that all required information is listed in question form on the "W" (what we want to know) section of the KWL. This activity is designed to support the civics and history standards that require students to know about contributions of specific individuals to U.S. history.

What we <u>K</u> now	What we <u>W</u> ant to know	What we <u>L</u> earned

Rubric for Famous Historic Figures

Name _____ Date _____

0—no evidence; 1—limited understanding; 2—some understanding with room for improvement; 3—good understanding with room for improvement; 4—substantial understanding

Design Brief Rubric	0	1	2	3	4
The student restated the problem in his/her own words.					
The student brainstormed more than one idea.					
The student shared problems that occurred and their solutions through written notes or oral communication per teacher's instructions.					
The student tested the card to make sure <ul style="list-style-type: none"> • it is the correct size • its shape and appearance reflect the individual studied • it has the book's title and the author's name on the front • it has a lever-operated moving part • it has a pop-up • it includes the historic person's name and dates of birth and death • it contains five pertinent facts about the historic person on the front or inside. 					
The student evaluated how he/she could make it better next time.					

Rubric for Famous Historic Figures

Name _____ Date _____

0—no evidence; 1—limited understanding; 2—some understanding with room for improvement; 3—good understanding with room for improvement; 4—substantial understanding

Oral Communication Rubric	0	1	2	3	4
<p>3.1 The student will use effective communication skills in group activities.</p> <ul style="list-style-type: none"> a) Listen attentively by making eye contact, facing the speaker, asking questions, and summarizing what is said. b) Ask and respond to questions from teachers and other group members. c) Explain what has been learned. d) Use language appropriate for context. e) Increase listening and speaking vocabularies. 					

Standards of Learning

English (2010)

Oral Language

- 3.2 The student will present brief oral reports using visual media.
- a) Speak clearly.
 - b) Use appropriate volume and pitch.
 - c) Speak at an understandable rate.
 - d) Organize ideas sequentially or around major points of information.
 - e) Use contextually appropriate language and specific vocabulary to communicate ideas.

Reading

- 3.4 The student will expand vocabulary when reading.
- a) Use knowledge of homophones.
 - b) Use knowledge of roots, affixes, synonyms, and antonyms.
 - c) Apply meaning clues, language structure, and phonetic strategies.
 - d) Use context to clarify meaning of unfamiliar words.
 - e) Discuss meanings of words and develop vocabulary by listening and reading a variety of texts.
 - f) Use vocabulary from other content areas.
 - g) Use word reference resources including the glossary, dictionary, and thesaurus.
- 3.6 The student will continue to read and demonstrate comprehension of nonfiction texts.
- a) Identify the author's purpose.
 - b) Use prior and background knowledge as context for new learning.
 - c) Preview and use text features.
 - d) Ask and answer questions about what is read.
 - e) Draw conclusions based on text.
 - f) Summarize major points found in nonfiction texts.
 - g) Identify the main idea.
 - h) Identify supporting details.
 - i) Compare and contrast the characteristics of biographies and autobiographies.
 - j) Use reading strategies to monitor comprehension throughout the reading process.
 - k) Identify new information gained from reading.
 - l) Read with fluency and accuracy.

History and Social Science (2010)

History

- 3.3 The student will study the exploration of the Americas by
- describing the accomplishments of Christopher Columbus, Juan Ponce de León, Jacques Cartier, and Christopher Newport;
 - identifying the reasons for exploring, the information gained, the results of the travels, and the impact of the travels on American Indians.

Civics

- 3.3 The student will explain the importance of the basic principles that form the foundation of a republican form of government by
- describing the individual rights to life, liberty, and the pursuit of happiness; and equality under the law;
 - identifying the contributions of George Washington; Thomas Jefferson; Abraham Lincoln; Rosa Parks; Thurgood Marshall; Martin Luther King, Jr.; and Cesar Chavez;
 - recognizing that Veterans Day and Memorial Day honor people who have served to protect the country's freedoms,
 - describing how people can serve the community, state, and nation.

Mathematics (2009)

Geometry

- 3.14 The student will identify, describe, compare, and contrast characteristics of plane and solid geometric figures (circle, square, rectangle, triangle, cube, rectangular prism, square pyramid, sphere, cone, and cylinder) by identifying relevant characteristics, including the number of angles, vertices, and edges, and the number and shape of faces, using concrete models.

Science (2010)

Force, Motion, and Energy

- 3.2 The student will investigate and understand simple machines and their uses. Key concepts include
- purpose and function of simple machines;
 - types of simple machines;
 - compound machines; and
 - examples of simple and compound machines found in the school, home, and work environments.

Standards for Technological Literacy

Standard 8: Students will develop an understanding of the attributes of design.

Standard 9: Students will develop an understanding of engineering design.

Standard 11: Students will develop the abilities to apply the design process.

Please give us some feedback.

Complete the form below to let us know how this design brief worked for you and your students. Please be specific so that we might use your suggestions to improve the activity. *You can fill this out on your computer, or you can print it, fill it out manually, and scan it.*

Teacher: _____

School: _____

School division: _____

Design brief title: _____

Background	<i>Put an X in the appropriate column:</i>	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Does it set the context for the activity?				
Is it age-appropriate in language, length, and complexity?				
Does it reference prior learning and/or research that the students did that will facilitate designing a solution to a problem?				
Is it detailed enough that an adult will understand the purpose for the design brief?				
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>				

Design Challenge	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Does the challenge support your curriculum?			
Is it age-appropriate in language, length, and complexity?			
Is it detailed enough that an adult will understand the purpose for the design brief?			
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>			

Criteria Criteria are part of the challenge. They set the limitations for the design. They are not directions.	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use	N/A
Are the limitations age-appropriate?				
Do the limitations encourage critical thinking?				
Is the application of mathematic knowledge/skills integrated into the criteria? If not, should the skill area be addressed?				
Is the application of science knowledge/skills integrated into the criteria? If not, should the skill area be addressed?				
Is the application of social studies knowledge/skills integrated into the criteria? If not, should the skill area be addressed?				
Are language skills integrated into the criteria? If not, should the skill area be addressed?				
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>				

Materials Materials help set the limitations for the design. The list should include materials that might work.	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use	N/A
Does the materials list encourage a variety of design solutions?				
Does the materials list include a variety of choices for joining items?				
Does the materials list include materials that force students to make decisions?				
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>				

Tools Tools can be used in the construction of the designed product. They are used to manipulate materials. They cannot become part of the product.	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Are the tools listed age appropriate?			
Are all tools needed for the activity included?			
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>			

Standards of Learning	Yes	No
Does the design brief reinforce the targeted Standard of Learning(s)?		
Are the supporting Standards of Learning appropriate?		
What Standards of Learning would you add or remove?		

Standards for Technological Literacy	Yes	No
Does the design brief reinforce the targeted Standard(s) for Technological Literacy?		
Are the supporting Standards for Technological Literacy appropriate?		
What Standards for Technological Literacy would you add or remove?		

Tips for Teachers	Yes	No
Are the tips listed in the chart helpful for a first-time teacher?		
What tips would you add?		

Guided Portfolio	Needs to be rewritten	Needs minor adjustment	Is ready for classroom use
Are the instructions and questions age appropriate and clear?			
In the "Test your solution" section, do the questions force students to thoroughly test their solutions?			
In the "Evaluate your solution" section, do the questions force students to honestly evaluate their solutions			
COMMENTS. <i>If any of the questions above are marked other than "ready for classroom use," please provide suggestions here.</i>			

<p>Additional Comments Please use this area to provide general suggestions for improving this design brief.</p>