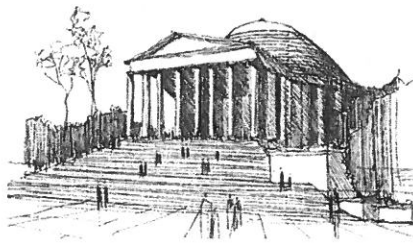


A MONUMENTAL TASK:

Connecting
Washington, DC
Across the Curriculum



Kim Brandt
7th Grade Math Teacher
& Program Dean
kbran@hawken.edu

Anna Delia
Middle School Interim Assistant Director
& Science Teacher
adeli@hawken.edu

Creative Commons Licensing Of These Materials

This packet contains materials developed at Hawken School in Lyndhurst, Ohio. We are licensing these materials under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, please visit <http://creativecommons.org/licenses/by-nc-sa/4.0>. For questions regarding re-use or future distribution of these materials beyond their intended classroom use, please contact Hawken School
Attn: Science or Math Department Chair
5000 Clubside Road
Lyndhurst, OH 44124
440-423-4446



You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:



Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.



NonCommercial — You may not use the material for commercial purposes.



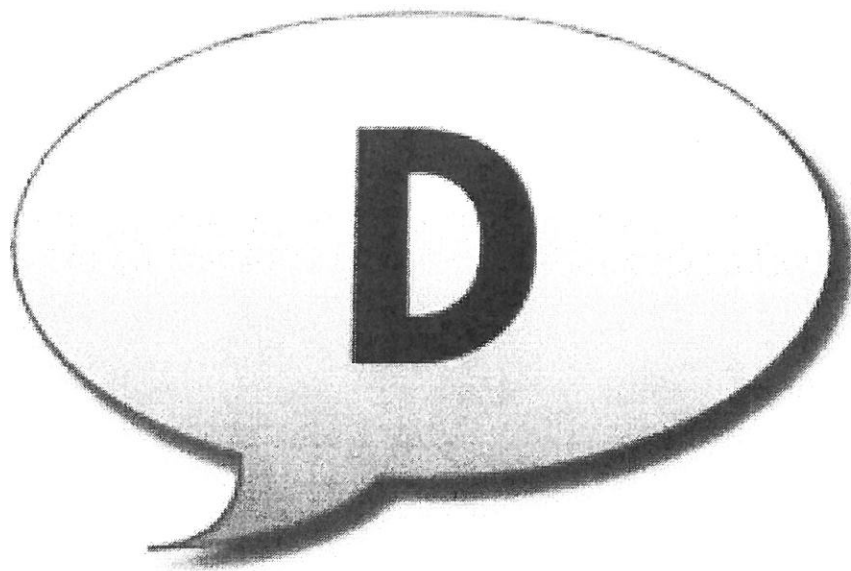
ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

Notices:

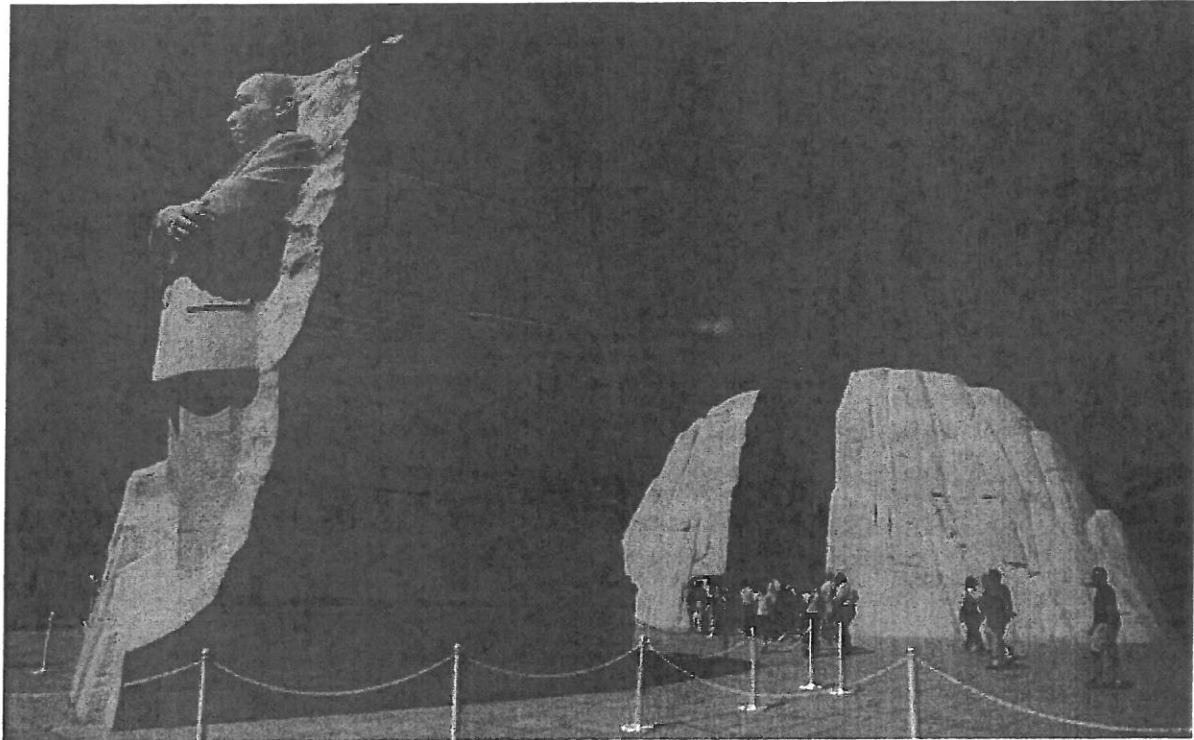
You do not have to comply with the license for elements of the material in the public domain or where your use is permitted by an applicable exception or limitation.

No warranties are given. The license may not give you all of the permissions necessary for your intended use. For example, other rights such as publicity, privacy, or moral rights may limit how you use the material.



description

Federal Government/National Park Service



Copyright *The New York Times*

Request for Proposals



CONTACT PEOPLE

Kim Brandt, Commissioner
Anna Delia, LEED Certification
Katie Lupo, Editor
Jim Scully, Historical Records

Proposals must be submitted to:

Team 7 Department of Planning
and Economic Development
5000 Clubside Road
Lyndhurst, OH 44124

Proposal Submission Date: April 29, 2016



This work is licensed under the **Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License**. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-sa/4.0/>.



An Invitation from Planning Committee

This Request for Proposal (RFP) provides details on proposing a new monument in a public space in Washington, D.C., that honors a person, group, or event in American history that deserves national recognition. You will need to draw from your understanding of historical figures, your study of historical events, and your knowledge of the nation's capital. Your monument should memorialize a person, group, or event that impacted our country significantly but does not yet have the proper recognition.

You will work with your design team for the next week. Teamwork is a valuable aspect of this project.

We invite you to review this RFP and submit a proposal in order to be a part of this exciting endeavor. The selection process is highly competitive.

Sincerely,

Mrs. Brandt, Mrs. Delia, Ms. Lupo, and Mr. Scully

Summary of Process

The Federal Government and National Park Service are using this RFP process as a means of selecting a qualified development team and proposal that best addresses the goals and objectives of the national – honoring a person, group, or event in American history that is deserving of a national monument in the nation's capital.

After the proposal deadline, the Federal Government and National Park Service will evaluate and score each proposal.

Proposal Summary Should Include:

1. Vision and Development Strategy
2. Google Earth Tour
3. Green Construction of model with LEED certification application
4. Meet the Designers
5. Gries Center Presentation & Pitch on April 29, 2016 (12:30-1:30)

Evaluation Criteria Will Include: Proposal including adherence to national goals, Design & creativity, Model, LEED Certification, Development team experience



Proposal Summary

1. Vision and Development Strategy: A detailed description of the project and approach to development (funding) of the monument related to the following:

A) Rationale—What is the problem that your group is solving? Give the reasons why you chose to memorialize this particular person or event and a convincing argument as to why your monument should be selected and constructed. What is the history of this person, group, or event? Historic images and photographs will be useful.

B) Description of the monument – description of the monument which includes the structures, green materials, public access, and explanation of design elements, including a highlight of the LEED features (What do the design choices symbolize? How do they represent your person or event?). What is the benefit to the area and to the nation?

C) Voices of your monument – Whose voices are most strongly heard, and why? How do you ensure that all voices are heard? Were there any left out, and why? How could there be a connection added to your monument in the future, to consider these groups?

D) Monument design – a drawing/diagram of the monument should be created using Sketch-Up. You should coordinate the ideas from all group members and sketches created during brainstorming sessions. You may need to include more than one drawing/diagram to clearly depict all areas and buildings on your plot of land. You should have available & turn in all sketches, from brainstorming sessions to the final design. If any changes are made to your design during construction, those changes should be reflected.

E) Funding - an explanation of how the monument will be funded. What organization or group of people will pay for the construction of your monument? Why? How do the organization's missions connect to your rationale? You need at least two funders.

F) Works Cited –proper MLA citations including at least 3 sources corresponding to your research; all research must originate with the MS Humanities Lib Guide, or be otherwise approved.

Put your name at the end of each section you worked on. Components A, B, C, and E above should be 1-2 paragraphs each.

You will also be evaluated on the visual aspects of your Vision and Development Strategy, which is a printed component of this project you will show along with your Google Earth Tour and Monument. You want the choice of layout, image, and design aspects to be appealing and consistent (colors, images, fonts, sizing) as they work together to illustrate the concept of your monument. For example, think of using just one font, consistent sizing for titles and paragraphs, colors that work together, etc.

Format of your RFP includes, but is not limited to, an organized packet, binder, folder, brochure, trifold, and/or poster display (to give you some ideas).



2. Google Earth Tour: You will need to choose a location in Washington, DC for your monument and create a brief Google Earth video tour of the site. Narration during the tour should clearly describe rationale for site choice and each group member should have a speaking part. Open your script with a powerful quote pertaining to your memorial.

Remember, site choice factors into your LEED score (see the next section), so you may want to understand how to earn points in this area prior to starting your tour script.

3. Green Construction of Model: Your monument & model should be constructed so that it gains the highest LEED rating possible. LEED rating will be based on actual points accrued using US Green Building Council Guidelines.

Aspects of environmentally sustainable design and construction need to be either physically present on your model or clearly articulated in your presentation. You should include a printed copy of the LEED spreadsheet with your model and print a copy to both your science & math notebooks.

It must be constructed on the piece of land that you are provided and you must use the materials provided, keeping it "environmentally friendly."

If you would like to use any additional materials, you must get permission from the project managers.

Materials Available to You:	Chip Board (14 ply)	Construction Paper
	Card Board	Masking Tape
	Model Magic Clay	Glue
	Any recycled or recyclable materials	

Optional Component: Students wishing to also create a 3-D printed model of their monument should refer to the supplemental handout, "3-D Printing Your Monument", available from Mrs. Delia.

4. Meet the Designers: The panel of judges would like to know your team members' experience and reliability. Each member should write & display a statement paragraph with their background, experience & professional highlights.

5. Gries Center Presentation & Pitch: Persuade the Federal Government/National Park Service officials and community members that your monument should be chosen by an independent panel of judges for construction in Washington, D.C.



MONUMENT PROJECT

(Actual Land Size: 45m x 30m, Model Size: 45cm x 30cm)

GROUP MEMBERS ~

PROJECT MANAGER (your designated teacher) ~

SIGNIFICANT EVENT OR PERSON MEMORIALIZING ~

TASK LEADERS

Indicate which group members took the lead on organizing the following sections ~

Vision & Development Strategy:

Google Earth Tour:

LEED Certification:

Construction & Presentation:

VISION & DEVELOPMENT STRATEGY

Indicate which group members completed the following sections ~

A) Rationale:

B) Description of Monument:

C) Voices of your Monument:

D) Monument Design (Sketches & Sketch-Up):

E) Funding:

F) Works Cited:

*A, B, C, E should each be a different group member.

GREEN CONSTRUCTION/LEED CERTIFICATION

Indicate which group members completed the following sections ~

Local & Transportation (Google Earth Tour Manager):

Sustainable Sites:

Water Efficiency:

Energy & Atmosphere (Heavy Math Calculations):

Materials & Resources (Construction Manager):

Indoor Environmental Quality:

Innovations (Can be everyone):

Regional Priority (Google Earth Tour Manager):

3-D Printing Your Monument

Background:

Based on your blueprint design, your monument may also be a candidate for 3-D printing on a Makerbot 3-D Printer. Visit <http://store.makerbot.com/replicator2.html> to read some background on this technology. In order to access this option, please follow the procedure and criteria below. It is important to know that choosing this option does not replace building your monument out of model clay; it is just an additional way to show your design. The 7th grade has a partnership with TechCentral at the Cleveland Public Library, which will enable your design to be printed using their Makerbot Printer. You may visit TechCentral to see your monument model printed live, or just wait until the finished product arrives at school. The only cost for the model is for materials, which the Science Department plans to cover for you.

Skills:

In order to complete this option, students will need to exhibit an intermediate knowledge of SketchUp (www.sketchup.org), its functions, and how to manipulate designs made using the program. Certain constraints (i.e. available printing size) require background knowledge and flexibility using this program.

Procedure:

1. Gain background knowledge of available printing models and successful designs. Visit www.thingiverse.com for an online library of printable models.
2. Check to make sure you have the most-to-date version of SketchUp on your computer. You may want to have a mouse ready to help you, as that makes the program easier to navigate.
3. Use SketchUp to design your model, keeping in mind the following criteria/constraints:
 - a. Maximum print size is 8"W x 6"D x 6"H. Try keeping your monument design less than 6" in all dimensions.
 - b. Be cautious of overhangs and empty spaces. The 3-D printing technology requires a lattice of plastic to be printed as a support under any structure. Wide arches, overhangs, porches, and domes are challenging to print. Initial designs made with these features may require further revision in order to make them printable.
 - c. The simpler a design, the better. A dimpled dome may work (using flat triangular edges to create an overall "domed" look).
 - d. Add a "support plate" to the bottom of your entire design. This will create an area for your monument to print onto – think of this as your "site". See Mrs. Delia for an example design of a support plate (approx. 1mm thick) to add to your design.

4. Submit your design to Mrs. Delia for approval. We will work together with our partners at TechCentral to make any necessary drafts and modifications to your model so it will effectively print.
5. If you would like your monument printed in time for the presentations, you'll need to have it emailed to Mrs. Delia 5 school days in advance (i.e. email in on Monday for a Friday pick up). It is highly likely that due to the time scale of this entire project, you will receive your printed version of your monument after your group presents your clay model version.

Daily Schedule

MONUMENT PROJECT SCHEDULE

MONDAY, APRIL 13TH - Maya Lin Documentary & Reflection
Leadership Styles Inventory

TUESDAY, APRIL 14TH - Introduce Project (15 Minute Meeting)
Complete Individual Research
Integrated Math & Science (90 Minute Block)
KiloWatt Hour Work
Deciphering an Electric Bill & Meter Reading

WEDNESDAY, APRIL 15TH - Announce Groups (15 Minute Meeting)
Group Discussion & Agreement on List of 10+ Ideas
Integrated Math & Science (90 Minute Block)
Energy Audit of Dining Room

THURSDAY, APRIL 16TH - Monument Selection (15 Minute Meeting)
Integrated Math & Science (90 Minute Block)
LEED Features, Spreadsheet, Websites
Speaker - LEED Certified Architect

FRIDAY, APRIL 17TH - Kick-Off Rotations -Lakeview Cemetery, Technology & Monument Research

Goals For Day:

- Gathering of Design Ideas
- Consider Sites
- Division of Tasks (FILL IN group roles on Division of Tasks Form)
- Begin Proposal

MONDAY, APRIL 20TH - 2 90-Minute Blocks

Goals For Day:

- Finalize Design Ideas
- Sketches of Monument Design
- FINALIZE Site Selection
- Work on Proposal Components
- COMPLETE "Meet the Designer" Descriptions

TUESDAY, APRIL 21ST - 2 90-Minute Blocks

Goals For Day:

- Substantial Work on Proposal Components:
 - Decide on format of proposal
- Text for Google Earth Site Tour
- Construction Plan including Green Elements
- COMPLETE SketchUP Designs

WEDNESDAY, APRIL 22nd - 2 90-Minute Blocks

Goals For Day:

- Begin Construction
- Google Earth Tour
- FINISH Proposal
- Green Elements/LEED work

	Group 1	Group 2	Group 3	Group 4
Block 1	Construction	Work Time	Construction	Work Time
Block 2	Work Time	Construction	Work Time	Construction

THURSDAY, APRIL 23rd - 2 90-Minute Blocks

Goals For Day:

- FINISH Construction
- RECORD Google Earth Tour
- PRINT Proposal

	Group 1	Group 2	Group 3	Group 4
Block 1	Construction	Work Time	Construction	Work Time
Block 2	Work Time	Construction	Work Time	Construction

FRIDAY, APRIL 24th - Presentations

Goal For Day - Gallery Walk with Google Earth Tour

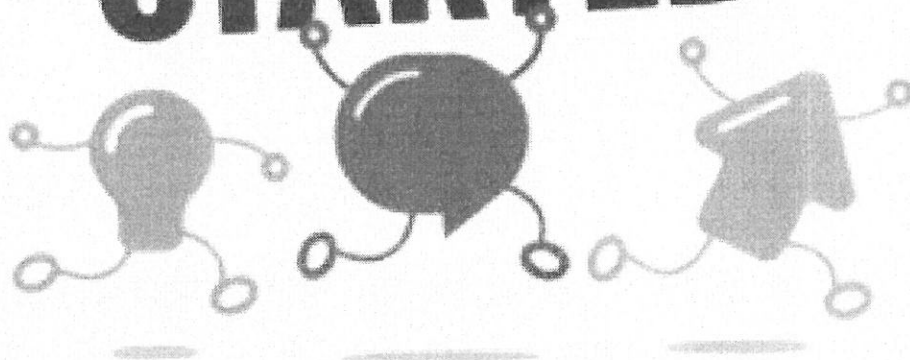
40 Minutes Presentation Prep
15 Minutes Set Up
1 Hour Gallery Walk

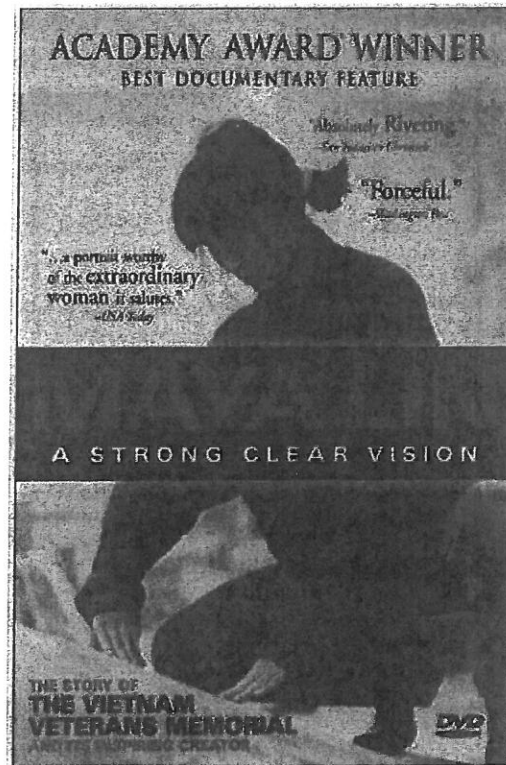
Monument Groupwork Reflections

Monday-Thursday Student Exit Card: Please fill out individual reflection on progress toward project completion

	Tasks I accomplished Today	Tasks I will complete for homework tonight	Today's Groupwork highpoint	Today's Groupwork Challenge
Monday				
Tuesday				
Wednesday				
Thursday				

LET'S GET
STARTED





Maya Lin: A Strong Clear Vision

After watching the Maya Lin Documentary, write a synopsis of the portion of the video that you watched that could be included on the back cover of the DVD. You should include the overall premise of the documentary, information about Maya Lin & the process to designing and constructing the Vietnam Veteran's Memorial.

Be sure to include:

- Pertinent information - **take notes while watching the video on a subpage**
- Paragraph style, 100 words maximum
- Grammatically correct & spell checked

****We know that you will not see the entire video, which is ok - just write for the portion that you watched. You will have a chance to watch the rest of the video at a later date.**

****You are NOT to look on the internet for information about the video!**



Name: _____

LEADERSHIP STYLES AND THE MONUMENTAL PROJECT

To "lead," as defined in the dictionary, means "to be in charge, to guide, to show the way." Based on your own life experiences, you already know that there are many types of leaders: Loud, quiet, those who lead by doing, and those who lead by yelling are just a few examples. You may be developing your own leadership style, one that fits your temperament and personality. Read through the following examples of different leadership styles. No one style is better than the others. As you read, consider your own leadership style and the coming week of teamwork. Then, respond to the questionnaire on the last page and be prepared to discuss your responses in class tomorrow.

INTRINSIC

People who prefer this method are self-motivated. They do not wait for others to help them. They look within themselves both for motivation and for standards of excellence. Even when others assure them that the job they have done is good enough, they are often dissatisfied, particularly if they do not feel they have given it their best shot. They enjoy the sense of autonomy that comes from not having to rely on others. Being in control of themselves and how they do the task gives them a sense of intellectual and creative freedom. They look within themselves for the resources to perform any given task. Tasks that represent a real challenge interest them regardless of whether or not they will receive any external reward. Doing a task well is reward enough for them. They know what needs to be done, and they can usually articulate that vision for others.

COMPETITIVE

People who prefer this style get tremendous satisfaction from performing a task better than anybody else. Being "number one" is what counts for them. Competition motivates them to do their best. Often, if a situation does not involve a competitive element, they lose interest. To avoid this, they frequently try to turn non-competitive situations into contests. If they do not come in first, they are disappointed, but not discouraged. They go back again and again until they finally succeed.

POWER

This type of leader likes to be in charge of everything: the agenda, the task, events, people and resources. Leadership positions attract these people and give zest and meaning to their activities. They have much less interest in situations that require them to be a follower, since they usually feel that they can do better than the current leader. They are very good at coordinating and organizing people and events. They know how to commandeer resources and use them to take control and get things done. Most of the time, they understand and act upon the need for delegating tasks to others. When they

delegate, however, they tend to keep control of the end result. Since they do not relinquish responsibility for the task, they tend to monitor the delegated activity rather closely.

PERSONAL

Leaders of this type tend to rely on themselves, using their personality, intelligence, wit, humor, charm, personal appearance, family background and previous achievements as instruments for further success. They enjoy public speaking and can usually convince others to help in their task. They have a flair for dramatic gestures and symbolism, selecting just the right symbol to convey the core meaning and importance of the task. Their knack for taking counter-intuitive, or unexpected action, takes both their supporters and opponents by surprise and captivates the imagination. They have a highly developed sense of timing. They know how to use ritual and costume to communicate their message. They are very persuasive and use well-honed negotiating skills to resolve conflicts.

SOCIAL

People who prefer this style tend to have a basic approach to accomplishing things. That involves selecting other people whose special skills are relevant to the task at hand. They like to do things through other people, and they always recognize the connections between people and tasks. They keep good mental notes about the specific talents, knowledge and contacts of all their associates and easily link them to appropriate tasks. They have strong political and networking skills, which they call upon comfortably. They keep in touch with a large network of people who feel remembered, liked and ready to help them. They gladly put friends who need help in touch with just the right helper. They are more likely to pick up the telephone and call someone for information than to go to the library or database to dig it out. Their network of friends is their database.

COLLABORATIVE

People who prefer this style enjoy accomplishing a task by doing it with others, from a single collaborator to a team. Faced with a task, their first response is to call on one or several others to participate in the project. They usually try to avoid working in isolation. People who use this style like the camaraderie of working with others and feeling devoted to the group and its goals. They are willing to do their portion of the work, but they also expect to receive their fair share of the prize. If the team does not succeed, they accept their proper measure of responsibility.

CONTRIBUTORY

This type of leader likes to work behind the scenes to help others accomplish their tasks. They take satisfaction from doing their part well so that the other person or group is successful. They know that their contribution has made a difference to the other party's success, and this gives them a satisfying sense of accomplishment. They see themselves as a partner in the other person's task, but they also understand that the major accomplishment belongs to the other person. They are pleased to participate in important undertakings and often

volunteer to help others whose goals they respect.

VICARIOUS

Leaders with this style derive a real sense of accomplishment from the success of others with whom they identify. They know how to be a good mentor, offering encouragement and guidance to others. They are happy to support other individuals and groups with reassurance, direction and praise, but they do not get into the act themselves. They feel very comfortable as a spectator or supporter of someone who is the main achiever, rather than as a direct participant in the task. Their sense of pride in the success of others is sufficient reward; they do not need to take credit for their accomplishments.

ENTRUSTING

People who prefer this style tend to know how to make other people feel that they are counting on them. Their confidence in others makes them feel they can do the task, even if they have no specifically relevant experience. They entrust their goals and tasks to others and believe that those others can accomplish the task as well as, or even better than, they can on their own. When they give a task to someone, they generally expect that person to come through with minimal supervision. Their trust usually has the effect of empowering those on whom they rely, although, at the onset, the people they select may quietly wish for more explicit directions and advice. Nonetheless, people who prefer this style are very good at bringing out the best in others. In most cases, they simply expect everyone around them to help with their tasks. They engage in leadership through expectation. They are less concerned than the social leader about selecting just the right person for a specific task, because they simply believe that people will reach within themselves to live up to their high expectations.

Forecasting Success: Leadership and the Monumental Project

1. Which of these leadership styles - if any - best describes you as a leader?
2. Why do you think this way? Are there particular experiences (the more recent the better) that serve as an examples of you leading in this way?
3. Consider the coming week's Monumental Project and the characteristics of successful groups we brainstormed as a group. Are there particular leadership style(s) that will help your team to function more effectively? Why?
4. How will your leadership style positively contribute to your team? Be specific.
5. How will you know if your leadership is contributing positively to your group's progress? Be specific.

Advisory Doorways Research 2015-2016

Each advisory will be researching some of the important people, places, and events that we will encounter while visiting Washington DC this May.

For each person/event/place, please conduct researched utilizing the MS Humanities LibGuide and fill in an information chart (attached) for each of your assigned topics.

This information will be put onto poster size post-it notes, displayed during a Gallery Walk on Friday.

For each assigned person or event, please research and respond to the following:

IDENTIFY – Explain identifying information about this person/place/event

CONTRIBUTION – In what ways does this person/place/event contribute (accomplishments) to the story of American history

TIME – When in American history does this person/place/event exist

PLACE – Where does this person/place/event take place; what is it near; what is interesting about this location

SIGNIFICANCE – What is the significance and/or importance of this person/place/event to American history?

Brandt Advisory

- Dr. Martin Luther King Jr
- Battle at Gettysburg.
- Ford's Theater

Gretter/Lupo Advisory

- Maya Lin
- Challenger Disaster
- The Supreme Court

Scully Advisory

- Robert E. Lee
- WWII and Iwo Jima
- The Kennedy Center

Delia Advisory

- Abraham Lincoln
- September 11, 2001 (DC)
- The Women's Memorial

McCue/McClintock Advisory

- Franklin Delano Roosevelt (FDR)
- Vietnam War
- The White House

Barkett Advisory

- John F. Kennedy (JFK) and family
- Korean War
- US Capital Building

Advisory Doorways Research Information Charts

2015-2016

SUBJECT:

IDENTIFY Explain identifying information about this person/place/event	CONTRIBUTION In what ways does this person/place/event contribute (accomplishments) to the story of American history	TIME When in American history does this person/place/event exist	PLACE Where does this person/place/event take place; what is it near; what is interesting about this location	SIGNIFICANCE What is the significance and/or importance of this person/place/event to American history?	OTHER INTERESTING OR IMPORTANT FACTS

Advisory Doorways Research Gallery Walk

Student: _____

[illegible]

MONUMENT KICK-OFF DAY

Speaker: LEED Certified Architect

3 Activity Rotation

1. Lakeview Cemetery Visit - Garfield Monument, other monuments
Features, Landscape, Senses, Sketches
2. DC Monument Design & Research
Personal Connection, Symbolism, Voices, Design Features, Quotes
Creation of Slide
3. Project Design & LEED
8-Square Brainstorm
Discuss & Share 2
Sketch 1

Expert Presentation Example Reflection

You may have access to an abundance of local experts in your area or even a parent within your school community. We suggest connecting with an expert wherever possible! We often have a phone conference or meet in person with an expert and outline our project and goals for student learning. We provide a special schedule, lunch option, or dedicate a class day to give our expert 20 minutes to present to students.

We've hosted architects, patent attorneys, engineers, lighting sales managers, local utility workers, and various artists as we learn about LEED certification and Green Energy options.

Example Reflection:

Using your saved Powerpoint presentation and notes from our recent expert guest, write a summary of the different types of [lightbulb, stone, native species, glass, water-faucet, etc] options you could use for your monument. Using some of the facts from the presentation, explain why you might choose to use a "greener" option in your monument design. You should include at least 3 facts from the presentation and your notes.

DC MONUMENT DESIGN

1. ANALYZE the displayed Ohio Monuments

Look for Symbolism, Voices, Math Concepts, Design Elements
Add thoughts on post it notes

2. DISCUSSION - Personal connection to a monument they've already been to

Approach monuments and memorials as "thought objects," says James A. Percoco. Instead of using them to teach only about the historical events they memorialize, look at how they memorialize those events, who erected them, who designed them, and how they've been related to and used by the community since their erection. Monuments and memorials are living pieces of history, not static markers on a timeline.

What is the difference between a monument & a memorial?

Monument - more a mark of achievement or historic marker, considered an object of remembrance

Memorial - more somber, remembrance, celebrate & honor the uniqueness of life, celebrate the characteristics of the individual, serve as a resource to honor individual & educate others, incorporated monuments

What is the purpose of monuments & memorials?

Preserve the past, Honor the heroes/moments, Commemorate tragedies, Inspire

What is needed to have a "good" memorial? What are things that you liked about it?

What did you leave thinking about & reflecting upon?

Whose voices were represented? How?

What are the challenges of when creating monuments?

3. ANALYZE Fireman's Monument Together

4. GROUP RESEARCH - Each group is given a DC Monument, Create a PPT slide, Email before next session

Picture

Design Elements

Symbolism

Voices of the Monument

Quote

Interesting Facts

PLACES -

Jefferson

National Law Enforcement Memorial

Kennedy Center

Supreme Court

Korea

Washington Monument

Capitol

Ford's Theater

Iwo Jima

FDR

Vietnam

Pentagon 9/11 Memorial

Arlington Cemetery

WW2 Memorial

MLK Jr

Lincoln

Air Force Memorial

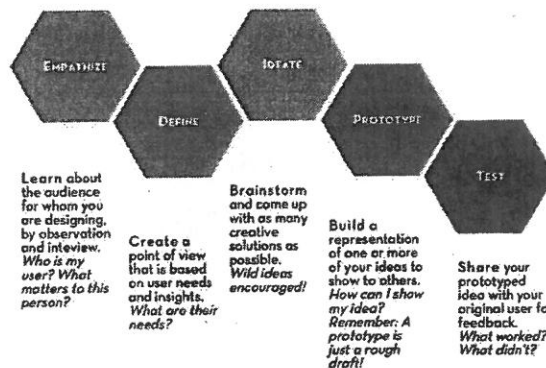
Monument Project Design Session

Remember Design

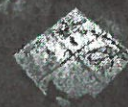
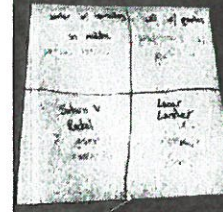
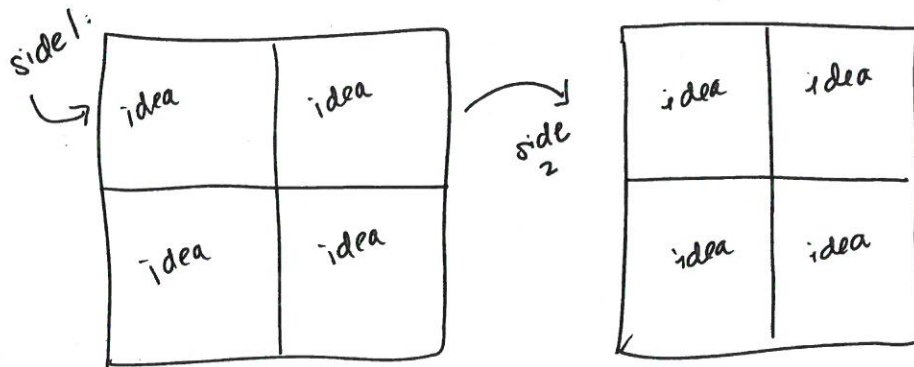
Steps:

Empathy
Define
Ideate
Prototype
Test
(Iterate)

We are all DESIGNERS!



Quick Brainstorm: Crazy 8s!



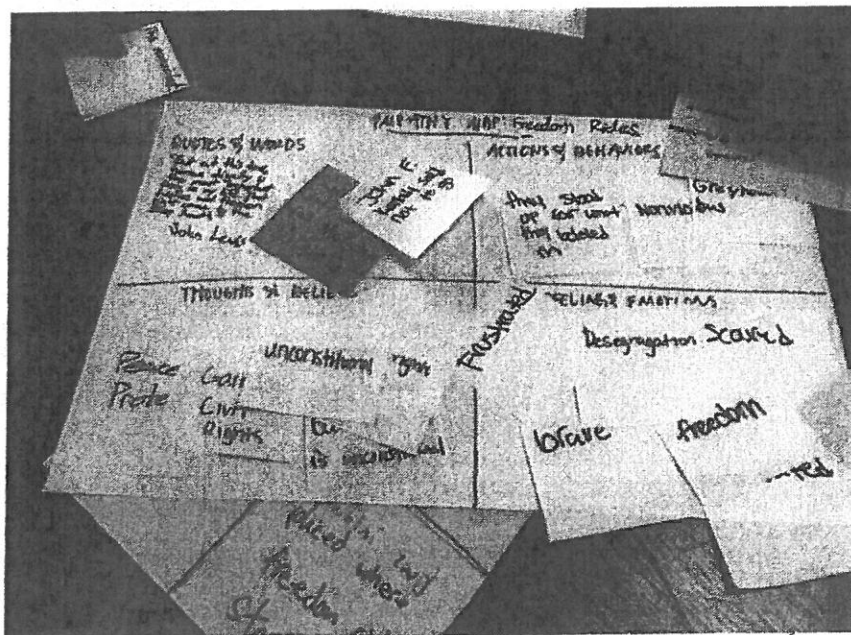
Share top 2 ideas out to group



Empathy

- ▶ In designing your monument, consider the empathy focus: What are their hidden needs, pain points, missed opportunities? Why do we need this monument?
- ▶ Draw an empathy map with your group:

What actually happened when this event occurred? QUOTES AND WORDS	What actually happened with this experience occurred? ACTIONS & BEHAVIORS
What assumptions do you make from your research: What THOUGHTS & BELIEFS do you think they had?	What assumptions do you make from your research: What FEELINGS & EMOTIONS do you think they had?



Define

1. Take the entire chart and focus into ONE word
2. Write a Monument Statement with these 3 items:
 - ▶ Describe the Person/Event with a specific adjective
 - ▶ Describe the Needs
 - ▶ Give the reason by Surprising Insights you've found

"This _____ person/historical event needs _____ so that _____."*

*this can change and evolve during the remainder of the project work time as your group makes more decisions about your monument and does more research.

Example for Dr. Martin Luther King Jr:

"This BRAVE SOUTHERN AFRICAN AMERICAN needs A MONUMENT LIKE A MOUNTAIN so that AMERICANS WILL VIEW HIM AS A ROCK FOR ALL TIME."

These Scared and innocent
Native-Americans need a
monument so that their hard-
ships can be memorialized by
the American community

Michael, Finn, Amela, Lin, Sisy

Ideate

- ▶ Generate as many ideas as possible to potentially solve the user's need
 - ▶ Can be specific or broad
 - ▶ Should briefly describe your idea
- ▶ Stick them onto group's idea sheet



Refine (we can prototype next week!)

- ▶ Look through all your ideas - Crazy 8s, your idea board, and your Monument Statement.
- ▶ Each person select one idea they feel very excited about.
- ▶ Create a sketch of your idea on the graph paper

Inclusion

- ▶ In the last few minutes, decide how you will work to include everyone's ideas and enthusiasm.
- ▶ Know you can modify your monument statement and designs until the end of work time on Tuesday.
- ▶ On Wednesday, your SketchUp and construction plan should be complete, so passionate brainstorming should come to a close before you arrive to construct.

Math, Science, and Design Principles in Local Monuments & Memorials

This activity may be used as an option to draw students into your local commemorative spaces and consider some of the principles you hope they will use to design their memorial or monument. It's a great springboard to help students identify and discuss prior understanding and their reactions to various memorial styles.

Students Will:

- React to local/regional memorials, or chosen memorials/monuments of relevance
- Begin to identify terminology relevant to monument and memorial design
- Connect prior math and science concepts to designs
- Interact with a variety of other students and understandings
- Create visible thinking maps

Supplies

- Large chart paper, with photos of chosen memorials attached in center
- Post its, a small stack for each student
- Sharpies, 1 per student
- Guiding questions (to top chart paper)

Selection of Guiding Questions

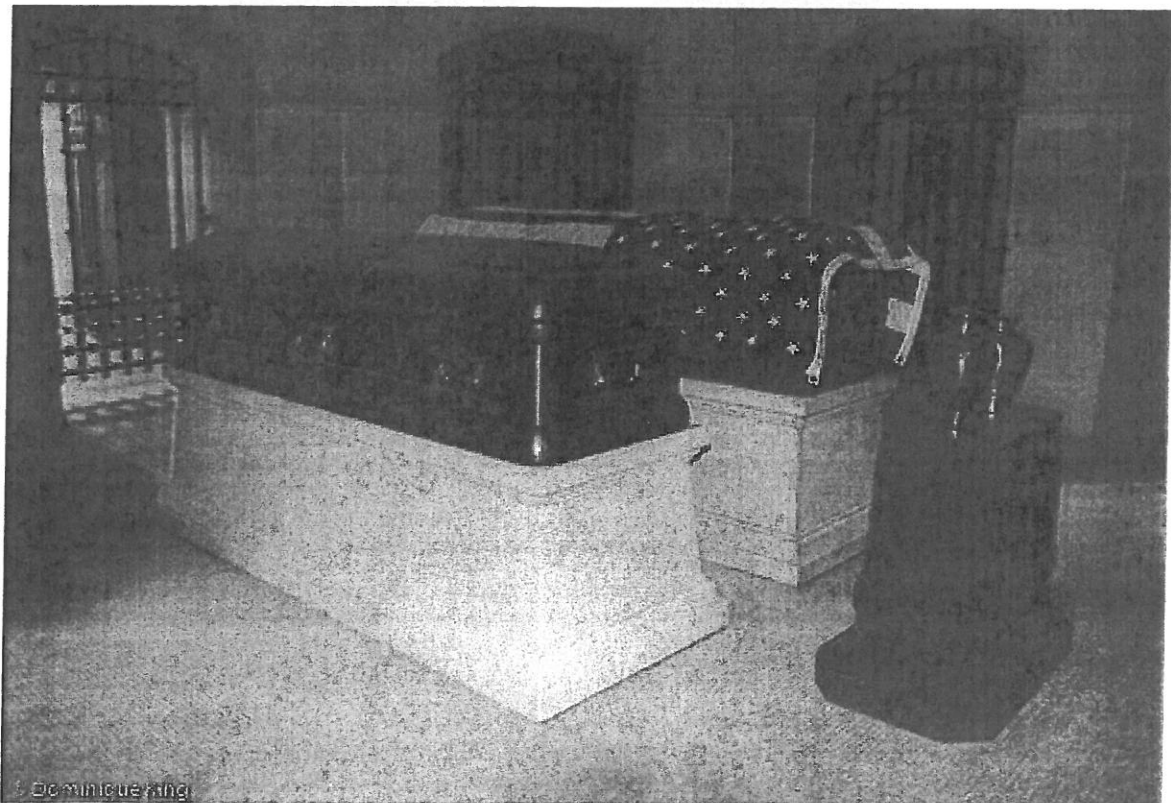
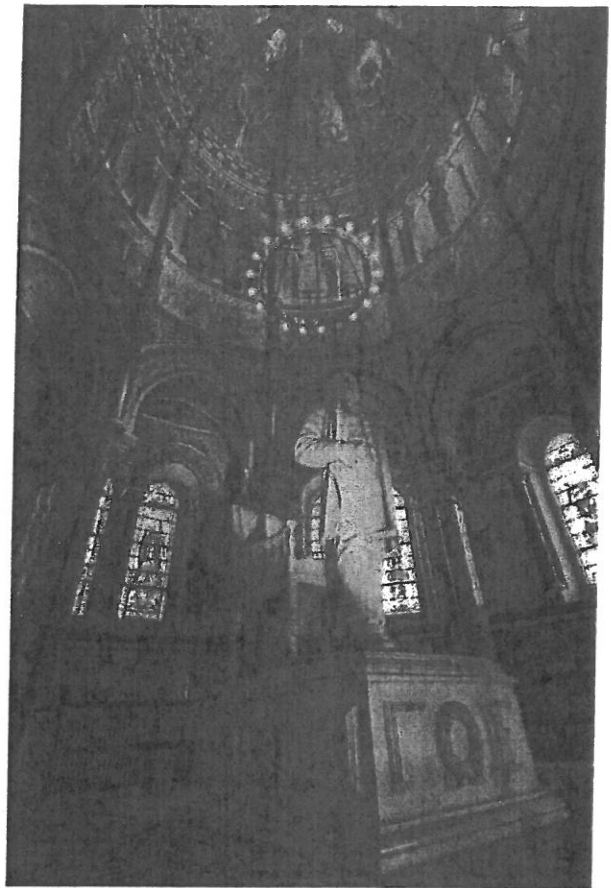
- What physics principles are present in this memorial's architecture?
- What voices are present in this monument? What voices were excluded from this monument's design?
- Where does your eye first go when looking at this monument?
- How do the chosen construction materials add to the memorial's significance and design?
- In what ways is does this design incorporate local, sustainable, and green architecture?
- What math concepts were utilized in this monument's design?
- Do the materials in these monuments reflection our regions geology and botany?

Basic Procedure

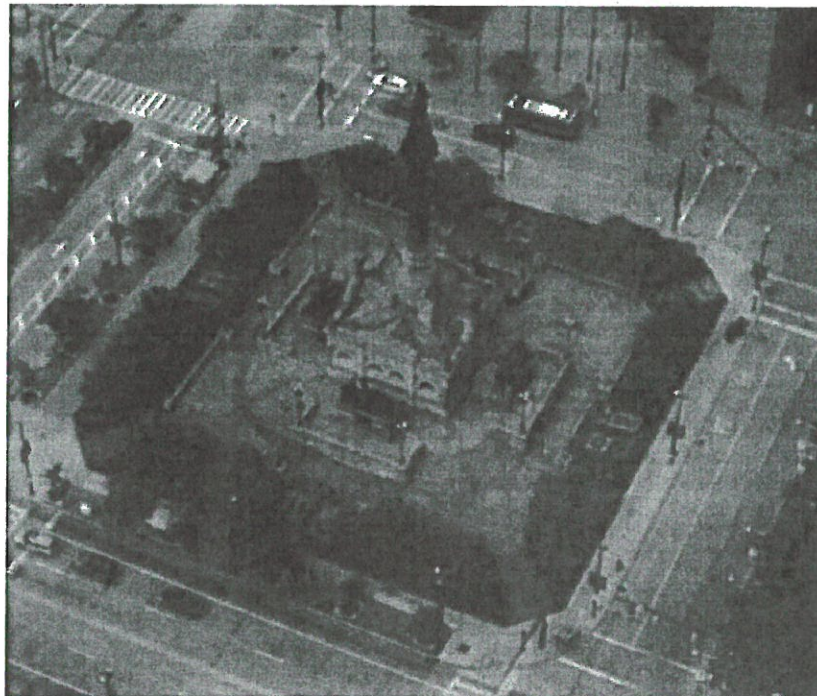
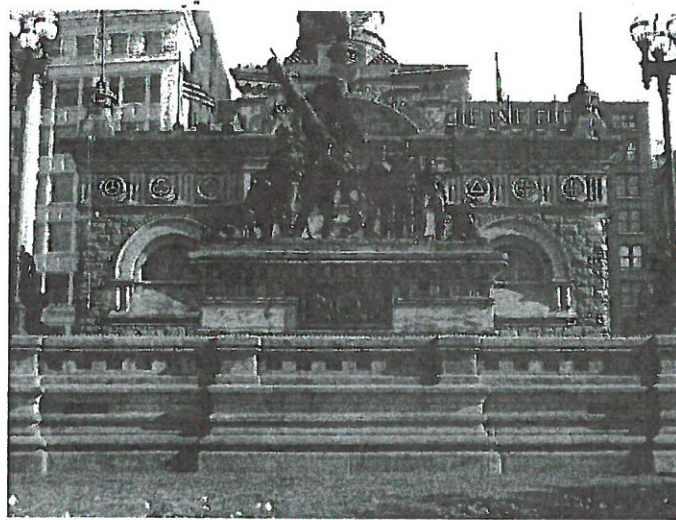
- Place large chart paper around classroom with memorial photos and guiding questions affixed.
- Pass out sharpies & post its
- Allow students to "gallery walk" around to different memorials and react to questions.
- Finish activity by travelling as a class to read others' reactions.



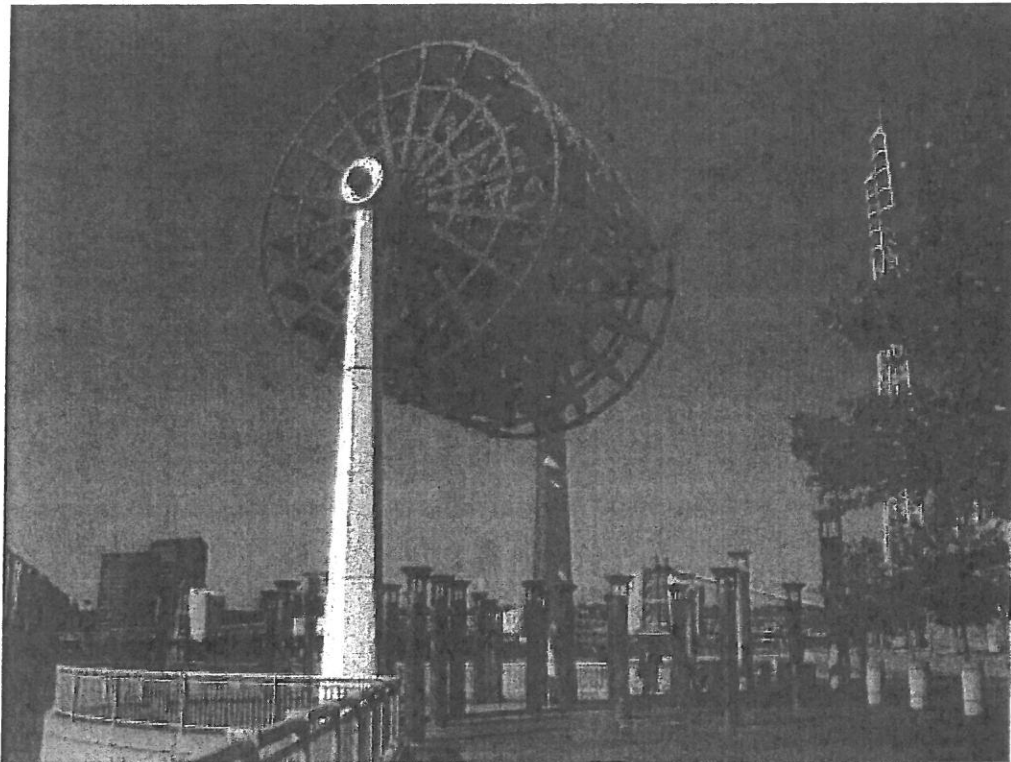
GARFIELD MEMORIAL (Lakeview Cemetery, Cleveland)



SOLDIERS & SAILORS MONUMENT (Public Square, Cleveland)



STEAMBOAT MONUMENT (Cincinnati, Riverbank)



A salute to steamboats

The \$2.8 million National Steamboat Monument on Cincinnati's riverfront should be complete in January 2001. It will include the original paddle wheel from the American Queen steamboat. Whistle Grove, a series of columns called torchiers, will tell the story of steamboating using sound and steam.

Paddle wheel: The stationary three-story, 60-ton paddle wheel was donated by the Delta Queen Steamboat Co. of New Orleans.

Torchier detail

Steam jet

Steam light

Interactive light

Speaker

Photo cell

Night light

Power/signal cables

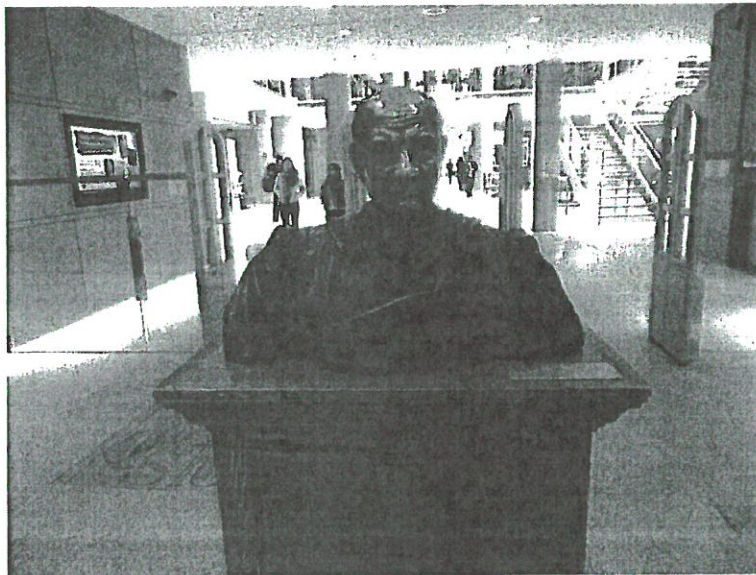
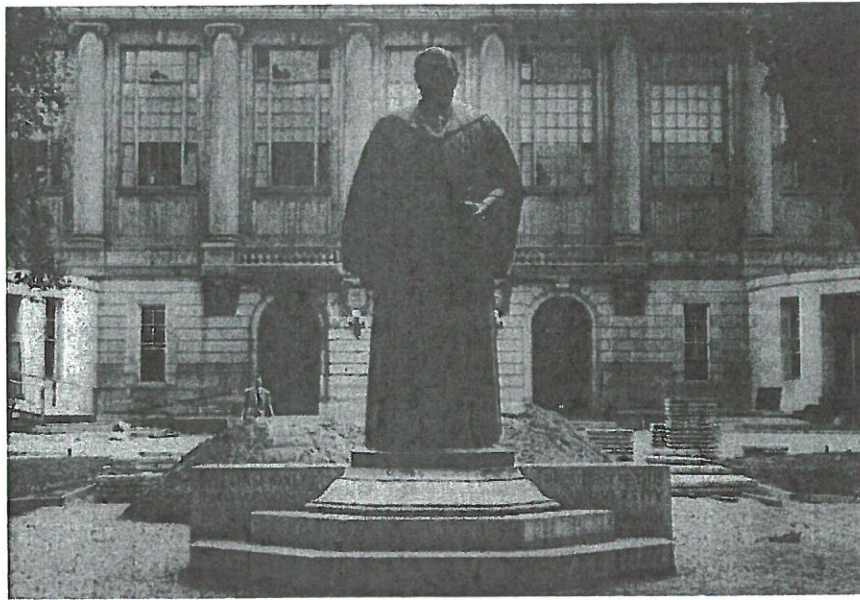
Steam pipeline

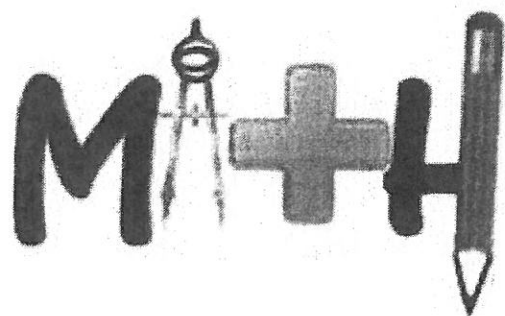


Torchiers: These columns emit jets of steam and sounds such as a calliope or boat whistle when visitors trigger a photo sensor.

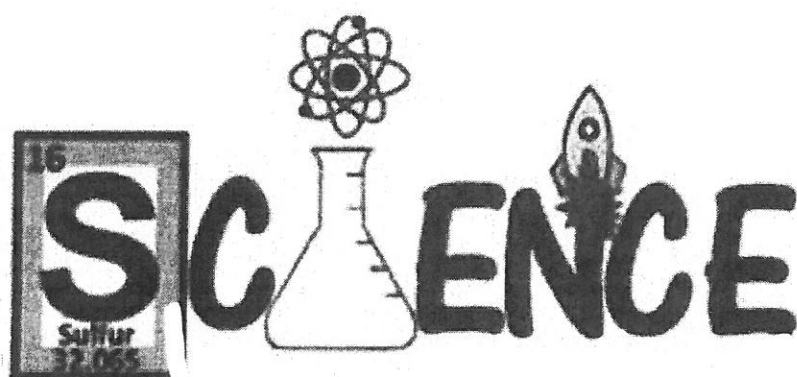
Riddle: A plaque on the plaza will contain a riddle. Visitors who solve it will be treated to a brief Whistle Grove performance.

THOMPSON MEMORIAL (Ohio State)





&



Deciphering An Electric Bill

A real monthly electric bill is provided in your "LEED Work" section of your notebook. This bill outlines the monthly charges for a home residence in Cleveland. Take a look over the bill and answer the questions below. It may also help if you read the Letter Key on "How to read an electric bill" to understand some of the sections of the bill. Please remember to show your set up and work.

Questions

1. a. What was the billing period for this electric bill?

b. How many days were measured during this billing period?
2. Find the "Usage Information". What were the two kWh readings for this customer?

Date	Reading

3. Calculate the number of kWh this customer used during the billing period.
4. Based on the number of days measured during this billing period, what was the customer's average daily use of kWh?
5. Where on the bill can you find how much the customer is charged per kWh? What is this amount (in dollars)? (This cost is standard to every customer in the Cleveland area)
6. Calculate the cost, in dollars, of this customer's usage fees. See if this matches the usage charges listed on the bill.

7. Locate the "Usage History" section of the bill.
 - a. In the last year, when was the peak month of energy usage for this customer?
 - b. Provide some reasons you believe this may have been the highest month of energy use.
 - c. In 2010, the average American household used about 12,000 kWh per year. Does this customer use more, less, or equal in amount to the average American home?

kiloWatt – hour (kWh) & Costs Practice Problems

Goals:

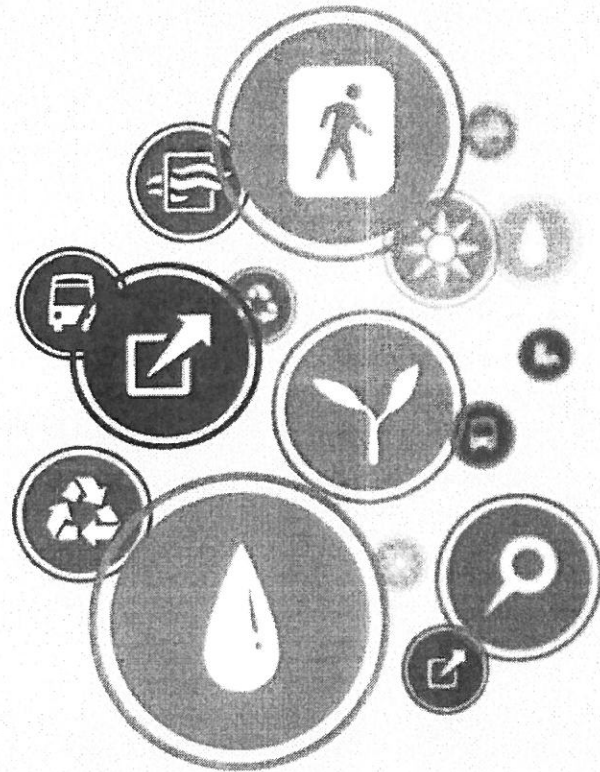
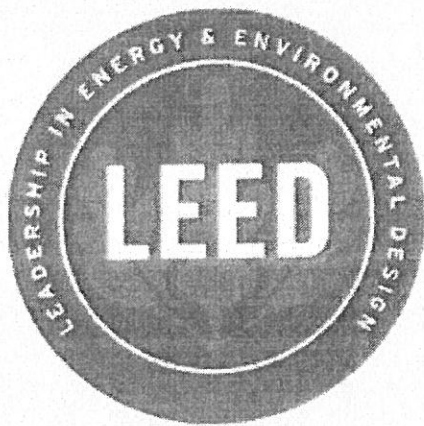
- Learn to calculate kWh given power and time
 - Learn to calculate expected costs given kWh and cost per kWh
1. A cooker has a power rating of 3 kW. If electricity costs \$0.10 per kWh, how much does it cost to run the appliance for 3 hours?
 2. A dryer has a power-rating of 2.5 kW. If electricity costs \$0.08 per kWh, how much does it cost to run the appliance for 30 minutes?
 3. A washing machine has a power rating of 2500 W. If electricity costs \$0.06 per kWh, how much does it cost to run the appliance for 90 minutes?
 4. A vacuum cleaner has a power rating of 1.2 kW. If electricity costs \$0.10 per kWh, How much does it cost to run the appliance for a year if it is switched on for 1 hour each day?

MIDDLE SCHOOL ENERGY AUDIT

Procedure:

1. With your partner, count how many light fixtures are in your section of the Middle School.
 - Determine the number of lightbulbs in the fixtures.
 - NOTE: Each bulb is 32-watts.
2. Record the number of fixtures in your area.
3. Calculate the total energy (kWh) used if all the lights are left on during all normal building hours (7:30 - 3:30, 5 days per week)
4. Calculate the total energy (kWh) used if the lights are only on during the morning, during the hours of 7:30-12:30, 5 days a week.
5. Using your results from #3 & #4, calculate the cost to the school for running your area lights for 1 month (4 weeks), if the base cost of energy in Cleveland is about \$0.057 per kWh.

LEED RATING



LEED Rating Quick Notes

START HERE:

All of the information about earning LEED credits is contained in the LEED manual, which can be downloaded from the US Green Building Council's Website. We also provide one printed paper copy to circulate among the students. However, many students have found the website easier to navigate to search for credits. It is really easy to use. See below:

Use this website to determine your credits. Select the link for each credit you're working on to read about it and find out how many points it is worth.

<http://www.usgbc.org/credits/new-construction/v4>

REGIONAL PRIORITY CREDITS:

For "Regional Priority Credits" on the spreadsheet, use this link to determine which credits can earn you 1 bonus point (each) in the Regional Priority section of the spreadsheet. You will need to fill in your monument's zip code. Choose "New Construction" and then "v4" and then "United States":

<http://www.usgbc.org/rpc>

INNOVATION AND DESIGN:

Students often ask how to get the "Innovation and Design" Credits. These are points awarded for going above and beyond a category that is already present on the spreadsheet. You can create a new innovation, or consider some of the previously used innovations here: <http://www.usgbc.org/credits/new-construction/v4/innovation-catalog>. Be ready to explain your new and innovative idea on the monument presentation day.

OTHER HELPFUL SITES:

- What are the steps to real Certification? <http://www.usgbc.org/leed/certification>
- Recent News Releases and Green Certifications: <http://www.usgbc.org/articles/grid>
- Credentials- what does it really take to be a LEED certified designer?
<http://www.usgbc.org/leed/credentials>
- Flood Risk Map can be found at: <http://ddoe.dc.gov/floodplainmap>
 - Monuments that will not flood are in zone X or X500
- Examples of Outdoor LED Flood Lights:
<http://www.lightbulbsdirect.com/page/001/CTGY/FloodsSpots>

LEED CERTIFICATION

	Group Member	Total Possible Points	Points Earned
Location & Transportation		16	
Sustainable Sites		10	
Water Efficiency		11	
Energy & Atmosphere		33	
Materials & Resources		13	
Indoor Environmental Quality		16	
Innovation & Design		6	
Regional Priority		4	
TOTAL POINTS		109	

40-49 CERTIFIED 50-59 SILVER 60-79 GOLD 80+ points PLATINUM

GIMME AN A!



GRADING & RUBRICS

LEED Grading for Monument Project

Monument:			
LEED Manager:			
General LEED Notes			
Group Member	Credit(s) Discussed	Notes	Suggested Grade

Google Earth Tour of your Monument

10 points total

Group members _____

Monument _____

Where in D.C. is your monument located? _____

Take us on a virtual tour to your site using Google Earth. (2 points)

Rationale:

Why did you choose this location? What is the significance of the site chosen? (4 points)

Did all members participate in the making of the tour? (Need to hear all voices) (2 points)

Yes _____ No _____

Did the tour take less than 3 minutes? (2 points)

Yes _____ No _____

Monument Project Vision & Development Strategy Rubric

Humanities Assessment

Group Monument:

I. Group Assessments:

1. Works Cited Page _____ /10 = _____ %

2. Layout & Design _____ /10 = _____ %

II. Individual Assessments:

1. Rationale _____ /10 = _____ %

2. Description _____ /10 = _____ %

3. Voices _____ /10 = _____ %

4. Funding _____ /10 = _____ %

Grade Calculation

Group Member	Individual Assessment	Works Cited Grade	Layout & Design	Total	Average Score: Final Humanities Grade

