# Google Sketch Monumental Structures Project

#### Created By Ryan Dalton Marshalltown High School

Unit (Opt.): Unit 4

Grade Level (Reg.): 10th - 12th | Content Area (Reg.): World

Grade Lever (Neq.). 10th 12th	History	eq.j. World	ome (opt.). ome 4	
Connections to Other Disciplines (Opt.):				
Connection to World History through examination of ancient cultures				
Connections with math and geometry through measurements and area				
<ul> <li>Connection to Economics with the idea of supply and demand and scarcity of resources</li> </ul>				
Time Frame (Req.): The		• • •	mental structure activity is for the	
complete lesion should take 10		-	le to create a monumental	
days to complete from the start	structure that signifies the empire of your selection and fits into the			
to presentations	trade and geography of the time and area.			
	Objective (Req.): The objective of the activity is to create a three			
	dimensional monumental, unique, and everlasting structure that			
	symbolizes your selected culture between the 100CE and 1800CE.			
	The second objective will be to research the location, the resources,			
	trade routes, people, specialized skills, and artisans to complete this			
	task. The created structure should symbolize the empire's region's			
	culture, history, location, power, and prestige			
Materials Needed (Req.):		New Vocabulary (Opt.):		
<ul> <li>school supplied laptops</li> </ul>		<ul> <li>spatial change</li> </ul>		
Google sketchup 8		•		
<ul> <li>Google earth</li> </ul>		•		
<ul> <li>understanding of and copy of information</li> </ul>		•		
from previously covered empire		•		
•				
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Anticipatory Set/Introduction [Inquiry Question is required] (Req.): 1. How does geography shape an empire? How does Geography influence an empire's structures or monumental building? These would be the first two questions posted on the board or projector to get the student's to engage in conversation. We would use different methods to arrive at solid ideas about the importance of geography in the creation shaping and success of an empire? 3. What geographic features allow empires to grow and become successful? Why? A fourth question would direct the students into the creation of a monumental structure that if they were the leader of an empire how would they show their successes.

#### Instructional Sequence/Procedure (Reg.):

- 1. Today we will begin our lesson by becoming familiar with Google Sketch Up 8 and all of the capabilities of the program.
- 2. After becoming familiar with Google Sketch Up 8, students will also become familiar with the different features and capabilities of Google Earth. (Both of these technologies will be used in the lessons and project

- monument for chosen culture. (Rubric and assignment explanation attached below).
- 4. After discussing the basic ideas for their three dimensional monumental structure in groups, students will present their idea to the teacher for approval and feedback.
- 5. After approval, the first student in the group may begin planning the dimensions for each portion of the monumental structure (interior and exterior). This student will also plan the interior design of the monument, (What do your rooms look like? What are the dimensions of the room?), as well as plan for the art in the monument (Place cultural appropriate art such as paintings, sculptures, or architecture within your monument).
- 6. The second individual of the group will need to find a location for their monument that was a part of their chosen empire and in the correct time frame. (This student should be able to answer, "Where did you place your monument?" using relative and absolute location, and "Does the location make sense based upon historical accuracy.
- 7. The third individual in the group will research and "locate" resources their empire would need to create this monumental structure. (This student should be able to answer, "What materials are needed in the construction? Where will you find these resources? Who may you need to trade with for these materials? How much will these materials cost?) These listed resources will then need to be located and/or placed on the Google Earth aspect of the project. (Example: Irish Marble (locate the quarry in Ireland you will use. Chinese Silks: where in china are these located?)
- 8. After each group member has completed their portion of the project, they will come together to actually create their three-dimensional monument.

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Formative Evaluation (Req.): This activity is the formative assessment in gauging the students' understanding of particular aspects of world history. They choose a culture, which we have covered throughout the class. They will use the information they have gathered from the culture to create a logical monument of the empire. See attached rubric

Assessment (Req.): This activity is used as an assessment before the final semester test. It utilizes multiple ideas and concepts previously covered throughout the semester. I use the activity as a way to assess the student's progression in the understanding of World History. Assessment Questions: ANSWER THE following QUESTIONS IN NO LESS THAN A PARAGRAPH EACH USING YOUR RESEARCH AND PRESENTATION. 1. What physical structures lend themselves to the importance of your structures? 2. How does the physical representation and human involvement in your structure symbolize your selected empires basic questions, Who are we? What do we do? Why are we celebrated/ Why are we important?3. How did you utilize human specialization of skills in creating this monumental structure? 3(b). How did the distribution of resources influence the selection of your building's location? 3(c). How did the building of this monumental structure create a localized society? Explain the stratification of the society and the roles or jobs associated with the construction. 4. How does your monumental structure symbolize your empires individuals and

groups? 5. How can you explain the spatial change of your environment based of the structure you created? 6. How does the construction of your monuments structure bring together differing groups of the empire? 7. How does your monumental structure display your empire's cultural story, human needs, values and successes?

### Iowa Core Curriculum Standards Used (Reg.):

- SS.9–12.G.1Essential Concept and/or Skill: Understand the use of geographic tools to locate
  and analyze information about people, places, and environments. § Understand the use of
  mental maps of physical and human features of the world to answer complex geographic
  questions.
- SS.9–12.G.2Essential Concept and/or Skill: Understand how physical and human characteristics create and define regions.§ Understand places and regions are important to individual human identity and as symbols for unifying or fragmenting society.
- SS.9–12.G.3Essential Concept and/or Skill: Understand how human factors and the distribution of resources affect the development of society and the movement of populations.§ Understand competition for and conflict over natural resources.
- SS.9–12.G.6Essential Concept and/or Skill: Understand how culture affects the interaction of human populations through time and space.§ Understand the processes of spatial change have affected history.
- SS.9–12.G.7Essential Concept and/or Skill: Understand how cultural factors influence the design of human communities.§ Understand people create places that reflect culture, human needs, government policy, and current values and ideals as they design and build places.

## Common Core Curriculum Standards Used (Opt.):

- SS.9–12.G.1Essential Concept and/or Skill: Understand the use of geographic tools to locate and analyze information about people, places, and environments. § Understand the use of mental maps of physical and human features of the world to answer complex geographic questions.
- SS.9–12.G.2Essential Concept and/or Skill: Understand how physical and human characteristics create and define regions.§ Understand places and regions are important to individual human identity and as symbols for unifying or fragmenting society.
- SS.9–12.G.3Essential Concept and/or Skill: Understand how human factors and the distribution of resources affect the development of society and the movement of populations.§ Understand competition for and conflict over natural resources.
- SS.9–12.G.6Essential Concept and/or Skill: Understand how culture affects the interaction of human populations through time and space.§ Understand the processes of spatial change have affected history.
- SS.9–12.G.7Essential Concept and/or Skill: Understand how cultural factors influence the design of human communities.§ Understand people create places that reflect culture, human needs, government policy, and current values and ideals as they design and build places.

#### NGS Standards Used (Reg.):

- Geography Standard 6 How culture and experience influence people's perceptions of places and regions
- Geography Standard 17 How to apply geography to interpret the past

•	Geography Standard 16The changes that occur in the meaning, use, distribution, and
	importance of resources

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#### Five Themes of Geography Used (Req.):

- Location: Absolute will be demonstrated by the placement of the monument at exact coordinates. Relative location will be demonstrated by having the students explain where it is located and by certain items
- Place: Will be answered when ask why they put the monument in the area. what made them select it
- Region: will be apparent with the monument selected and the art used: the building will define the similar characteristics associated with the area
- Movement: will be detailed when looking at the resources and how creating a trade network to bring the needed supplies in
- Human environment interaction: will be answered in the above ideas. It will demonstrated by the creation of the monument. the placement of the monumental structure, the materials used and needed and the creation of the monumental structure itself.

School District Standards and Benchmarks (Opt.):

- same as Iowa Core
- •
- •

# 21<sup>st</sup> Century Universal Constructs (Opt.):

### Other Disciplinary Standards (Opt.):

- Math ----dimensions, measurements,
- Industrial Tech: can use other CAD programs to create a building blueprint
- Economics: Study of supply demand, trade
- World Cultures: look deeper into the creative natures of a culture
- Language Arts: create a story to go along with the building as the center

Other Essential Information (Opt.): Project description attatched

#### Other Resources (Opt.):

- a 3 d printer would be interesting to use in this
- may use different programs or graph paper if Google sketch up is to challenging for some
- •
- •

CATEGORY	1 Needs	2 Developing (D)	3 Proficient (C)	4. Mastery (B)	5. Advanced (A)
	Improvement (F)				
1. Understands the use of physical and human features of the world to	Shows little or no attempt to demonstrate an understanding of	Demonstrates an attempt on understanding the standard by using	Demonstrates an attempt on understanding the standard by using	Demonstrates an attempt on understanding the standard by using	Demonstrates an attempt on understanding the standard by using
answer complex questions	the standard  0 examples in questions or example	one <b>solid</b> example in your presentation or explanation	two <b>solid</b> examples in your presentation or explanation	three <b>solid</b> examples in your presentation or explanation	four or more <b>solid</b> examples in your presentation or explanation
2. Understands how human factors and the distribution of resources affect the development of society and the movement of populations.	Shows/explains little if any description of distribution zero resources	Begins the descriptions of the resources used. describes at least <b>two</b> resources needed and the resources locations	Solid descriptions of the resources used. describes at least four resources needed and the resources locations	Advance description of the resources used. describes at least <b>six</b> resources needed and the resources locations	Superior description of the resources used. describes at least <b>eight</b> resources needed and the resources locations
3. Understand how the processes of spatial change have affected history	Demonstrates no concepts of the idea of spatial change in the example or presentation	Demonstrates a minimal concepts of the idea of spatial change in the example or presentation	Demonstrates a proficient amount of concepts indicating the idea of spatial change in the example or presentation	Demonstrates a advanced amount of concepts indicating the idea of spatial change in the example or presentation	Demonstrates a superior amount of concepts indicating the idea of spatial change in the example or presentation
4. Understand places and regions are important to individual human identity and as	Demonstrates little or <b>no</b> unifying symbols in your presentation or explanation	Demonstrates little or <b>few</b> unifying symbols in your presentation or explanation	Demonstrates an acceptable amount of unifying symbols in your presentation or explanation	Demonstrates an advanced understanding of unifying symbols in your presentation	Demonstrates a superior representation of unifying symbols in your presentation

symbols for unifying or fragmenting society.		(2 symbols)	(4symbols)	or explanation (6 symbols)	or explanation (8 symbols)
5. Understand people create places that reflect culture, human needs, and values	Demonstrates little or no reflection of cultural ideas in model or explanation	Demonstrates minimal reflection(s) of cultural ideas in model or explanation  (2 or less cultural ideas)	Demonstrates appropriate reflection(s) of cultural ideas in model or explanation  (4 or more cultural ideas)	Demonstrates advanced reflection(s) of cultural ideas in model or explanation  (6 or more cultural ideas)	Demonstrates superior reflection(s) of cultural ideas in model or explanation  (8 or more cultural ideas)

#### **GOOGLE SKETCH UP:**

CREATE A BUILDING OF AN ANCIENT CIVILIZATION:

DESCRIPTION: THE PROJECT YOU AND YOUR GROUP ARE UNDERTAKING IS THE CREATION OF A MONUMENTAL STRUCTURE FOR A CIVILIZATION (THE ONE YOU ALREADY REPORTED ON WOULD BE BEST). THE STRUCTURE AND THE LOGISTICS OF THE STRUCTURE NEED TO BE DESIGNED AND DETAILED. THE COMPLETED PROJECT WILL SHOW THE INS AND OUTS OF THE MONUMENTAL STRUCTURE. WE WILL HAVE A FEW DAYS IN THE LIBRARY TO GET ACCUSTOM TO THE SOFTWARE AND COMPLETE THE PROJECT.

- **OBJECTIVES:** (1). STUDENTS WILL CHOOSE AN ANCIENT CIVILIZATION TO FOCUS ON GIVE THE NAME OF THE CIVILIZATION, THE DATE OF THE CIVILIZATION AND THE LOCATION OF THIS CIVILIZATION.
  - (2). EACH GROUP (3) WILL DESIGN A FAMOUS BUILDING OF YOUR CIVILIZATION (PYRAMIDS, A ZIGGURAT, STEP PYRAMID, ETC.)
  - (3). EACH BUILDING MUST EITHER HAVE AN INTERIOR DESIGN OR AN OUTSIDE DESIGN WITH OTHER IMPORTANT BUILDINGS PRESENT.
  - (4). EACH GROUP WILL HAVE LOCATE THE SPOT WHERE THEY WILL BUILD THIS MONUMENTAL STRUCTURE ---- GIVE COORDINATES AND LAND STRUCTURE----WHAT IS IT LIKE (USE GOOGLE EARTH)
  - (5). EACH GROUP WILL NEED A LIST OF RESOURCES THAT IT WILL TAKE TO MAKE THIS MONUMENTAL BUILDING.
  - (6). WHERE WILL YOU FIND THESE RESOURCES (BE EXACT GIVE ME & PLACE) HOW WILL THESE RESOURCES GET TO THE JOB SITE.

## GRADING:

\*COMPLETED PROJECT WILL BE WORTH SIXTY POINTS. TEN POINTS WILL BE AWARDED FOR EACH OBJECTIVE. \*DAILY POINTS WILL BE GIVEN FOR COOPERATION, FOCUS, AND WORK. THIRTY POINTS A DAY WILL BE AWARDED FOR THIS TASK

ENJOY