Inquiry Project Design Plan

Teacher/Designer Names: Leanne Schwan - RHS		
Name of Project: Early River Valley - Innovations	Grade Level: 9	
Est Launch Date: 09/22/23	Est Duration (in days): 16	
Disciplines Involved: Social Studies/English/Technology/Engineering		

Problem Statement: Ancient peoples had to adapt to unhospitable environments in otder to meet their basic needs leading to the development of shared characteristics of culture. Through the development and use of shared technologies that address the need to adapt and modify the environments, humans made and continue to make advances that address farming and irrigation challenges as well as and cross cultural concerns that arose with increased population and interconectedness. By addressing these challenges and concerns, early civilizations developed successfully.

STAGE 1: DESIRED RESULTS

Big Idea: DEVELOPMENT OF CIVILIZATION		
Enduring Understandings:	Essential Question(s): (MEANT TO BE SHARED WITH STUDENTS)	
 Society evloves. Every era presents challenges to human development. These challenges have been addressed using historically significant innovations. 	 How do people respond to their environments? How did the development of agriculture affect the lives of people in early civilizations and their environment? 	
• The development of agriculture enabled the rise of the first civilizations, located primarily along river valleys		
• These complex societies were influenced by geographic conditions and shared a number of defining political, social, and economic characteristics.		

Established Goals (Standards, Performance Indicators, Learning Goals):

Social Studies Standards:

1

Standards: World History (2), Geography (3), Economics (4) **Themes:** Time Continuity Change (TCC), Geography, Humans, and the Environment (GEO), Creation, Expansion, and Interaction of Economic Systems (ECO), Science, Technology, and Innovation (TECH)

Practices: Compare, Connect Cause and Effect, Categorize, Annotate, Source, Close Read, Corroborate, Contextualizd, Itdentify Paterns, Construct Arguments, Predict, Think Like a Geographer

Gathering, Using and Interpreting Evidence Chronological Reasoning and Causation Comparison and Contextualization

ELA Standards:

Key Ideas and Details:

<u>CCSS.ELA-LITERACY.RH.9-10.2</u>: Determine the central ideas or information of a primary or secondary source; provide an accurate summary of how key events or ideas develop over the course of the text.

Text Types & Purposes:

<u>CCSS.ELA-LITERACY.WHST.9-10.1</u>: Write arguments focused on disciplinespecific content.

Comprehension and Collaboration:

<u>CCSS.ELA-LITERACY.SL.9-10.1</u>: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Technology Standards:

- ∉ NYS Computer Science and Digital Fluency: 9-12.CT.2
- $\not\in$ Collect and evaluate data from multiple sources for use in a computational artifact.

∉ ISTE: 1.3 Knowledge Constructor

Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.

Inquiry	Project	Design	Plan
---------	---------	--------	------

Students will know (SWK):	Students will be able to do (SWBAT):
9.1a The Paleolithic Era was characterized by	Students will explore how the Egyptian,
non-sedentary hunting and gathering	Mesopotamia, Shang, and Indus River valley
lifestyles, whereas the Neolithic Era was	civilizations adapted to and modified their
characterized by a turn to agriculture,	environments to meet their need for food,
herding, and semi-sedentary lifestyles.	clothing, and shelter.
9.1b Complex societies and civilizations	Students will explore the Egyptian, Mesopotamia,
adapted to and modified their environment	Shang, and Indus River valley civilizations by
to meet the needs of their population.	examining archaeological and historical evidence
9.1c Complex societies and civilizations share common characteristics of religion, job	to compare and contrast characteristics.
specialization, cities, government,	Students will explore the unique achievements of
language/writing systems, technology, and	the Egyptian, Mesopotamia, Shang, and Indus
social hierarchy.	River valley civilizations.
9.1d Complex societies and civilizations made unique cultural achievements and contributions.	

STAGE 2: EVIDENCE & ASSESSMENTS:

Performance Task Narrative:

<u>G</u>oal: Provide a statement of the task. Establish the goal, problem, challenge, or obstacle in the task.

Students will recognize that the development of agriculture enabled the rise of the first civilizations. These civilizations were located in varied environments but primarily along river valleys. The development of these complex societies were influenced by the creation of simple machines. These machines were used to adapt the geographic conditions and create and define shared political, social, and economic characteristics.

Students will research and design a prototype to solve irrigation problems faced by early civilizations. They will read and analyze documents and topographical maps and determine what best addresses each geographic features specific needs. They will then put their designs to a test by recreating the environment on CoSpaces software and present their findings using **Canva**.

<u>R</u>ole: Define the role of the students in the task. State the job of the students for the task.

Problem Solver, Engineer, Cultural Anthropologist, Cartogropherm Computer

Inquiry Project Design Plan

Scientist

Project Group Roles:

Facilitator, Reporter, Materials Manager, Presenter, Reader,

<u>Audience</u>: Identify the target audience within the context of the scenario.

Students will present their findings to their peers by creating individual websites which will be shared in the context of the classroom. Studnts presentations will take place in the classroom as a quarterly project.

Peer Teachers 6th grade World History Classrooms as well as Environmental Science Classes

<u>Situation</u>: Set the context of the scenario. Define the narrative.

Entry Event: Launch PBL by playing a game where students understand the importance of water. Students will form teams and using only a water bottle and race to fill a bucket - connect to drinking and agriculture

Ask: Building on student's prior knowledge of the uses and attributes of water, ask what complications migh arise based on environments. (Problem)

Observe and Research: the development of traits of cvilizations and their locations and determine the positive and negative features of living in or near a desert, a mountain, a river valley.

Imagine. **Plan and Design**: Create a solution to adapt or modify their inhospitable environment to address the problem of irrigation in early civilizations. (Perserve, Patience, Perfect)

Present: Students will present their plan and process using MineCraft and Canva

<u>P</u>roduct(s): Clarify what the students will create and why they will create it.

- Simple Machines (either virtually or physical prototype to address irrigation challenges faced by early civilizations.
- Create a Canva to present finding and final project be sure to include plan, problem, how you perservered, your patience

<u>Standards</u> (criteria for success): Provide students with a clear picture of success. Identify specific standards for success.

- O Check Ins
- O Self Reflections
- O Peer Evalution and Feedback (Collaboration and Creativity)
- O Rubric

Other Evidence/Assessments:

What are some different things you could try? What would happen if you...? What might you try instead?

Inquiry Project Design Plan

What will you do next? Tell me about your materials? Tell me what happened? What does this make you think of? What will you do next after you finish this part?

STAGE 3: THE LEARNING PLAN:

Learning Activities

(potential layout below. Can be daily, divided by periods, or even using the Engineering Design Process to divide into stages such as Ask, Imagine, Plan, Create, Improve)

Week 1

Learning Goals:

What is a civilization? What led to the establishment of civilizations?

• Identify the characteristics of a civilization.

Describe what led to the development of civilizations.

Where were early river valley civilizations located?

• Identify where early river valley civilizations were located.

Where were early river valley civilizations located?

• Identify where early river valley civilizations were located.

Learning Events:

- 1. Traits of a Civilization
- 2. Mapping Early Civilizations
- 3. Water Gathering Activity
- 4. Irrigation and Geography Research

Formative Assessments:

- 1. River Valley Map
- 2. Article Analysis
- 3. Planning and Reflection Log

Notes/Resources:

Summative - Peer Analysis

Week 2

Learning Goals:

How did the innovations of the early river valley civilizations affect their inhabitants and later periods in history?

- Describe the innovations of early river valley civilizations
- Explain how these innovations impacted inhabitants and later periods in history

Learning Events:

Imagine, Design, Plan, Revise Solution Irrigation Challenges of Early River Valley Civilizations

Formative Assessments:

Canva and MineCraft Presentation

Notes/Resources:

Students will work in small groups OR individually to solve irrigation issues and crate a presentation

Week 3

Learning Goals:

What were the historical circumstances and geographic factors that led to the creation of the Code of Hammurabi?

• <u>Describe</u> the historical circumstances and geographic factors that led to the creation of the Code of Hammurabi.

What does the Code of Hammurabi reveal about society in Ancient Mesopotamia under the Babylonian empire?

• <u>Describe</u> what does the Code of Hammurabi reveal about life in Ancient Mesopotamia under the Babylonian empire

How do we know what we know about society in Ancient Mesopotamia under the Babylonian empire? How is our knowledge limited?

- **Describe** what we know about Ancient Mesopotamia under the Babylonian empire
- <u>Explain</u> how our knowledge about Ancient Mesopotamia under the Babylonian empire is limited.
- <u>Describe</u> the types of corroborating evidence would help a historian develop a deeper understanding of society in Mesopotamia under the Babylonian empire.

Learning Events:

- 1. Analyze the geographic factors contributing to the writing of Hammurabi's Code
- 2. Study on need of society and affects development of law
- 3. Corroborate evidence on how we know what we know about these

civi	izations

Formative Assessments:

• Unit Regents Formatted Exam

Notes/Resources:

Ancient peoples had to adapt to unhospitable environments in order to meet their basic needs leading to the development of shared characteristics of culture.

Through the development and use of shared technologies, ancient peoples were able to address concerns and develop simple machines to adapt and modify their environments. Humans made and continue to make advances that address farming and irrigation challenges as well as and cross cultural concerns that arose with increased population and interconnectedness.

By addressing these challenges and concerns, early civilizations developed successfully.

With your group, address the geographical challenge faces by early peoples living in mountains or near rivers. Create a simulation to illustrate your solution using the platform CoSpaces and create a Canva to present your finding.