4th Nine Weeks Cross-Curricular Project Redeveloping Cities Around the World 7th Grade Project

Today, technology impacts every aspect of our lives; for people who live in developed countries, it is difficult to imagine that others live without the basic necessities of life. In undeveloped countries, people are plagued with economic turmoil, political unrest, civil wars, and the lack of natural resources. These challenges make it difficult for undeveloped countries to rise above the restraints of poverty. While Third World countries are now making strides in terms of economic growth, there are still others that are not catching up.

Directions: You have been hired by an advertising agency to develop and redesign an underdeveloped city. You will:

Part I: Complete Research Guide Sheet (See Google Classroom)

Research Guide Sheet is due to Mrs. Mosley by May 1, 2020

- Fill in each section completely
- Include sources (Ex: Websites, textbooks, magazines, videos, other media)
- Use academic writing mechanics (Capitalization, spelling, and punctuation)

Part II: Write a Research Paper

Write a research report about your city based on the information gathered in your <u>Research</u> <u>Guide Sheet</u>

- The research paper should include:
 - The basic information about your country (name, location, population, etc.)
 - A picture of the flag and what the colors stand for
 - A picture of the current leader and the government type
 - The natural resources (raws materials and goods imported and exported)
 - Educational structure
 - Central Disease
 - Foods of the country
 - Religions practiced in the country
 - Languages spoken in the country
- The paper should be MLA Formatted with images attached and labeled to the last page
- Submit a research paper using to Ms. Walls by May 8, 2020

Part III: Write a Proposal for your New City on how you would revise your city (see Google Classroom)

- Write out a proposal that will be presented to the city. Make sure important parts of the city are highlighted. Your proposal must be well written. The proposal should include a description of the city using geometric terms and why you think you have the best layout. Remember you want to WIN the bid!
 - 1. Project Title
 - 2. Project Objective

[One line identification of the objective of the project.]

3. Project Background

[One paragraph – just enough information to make sense of the proposal]

4. Project Description

[Two or three paragraphs to describe the project: What are you planning to remodel your city?]

5. Participants

[List participants of the organization: What business/companies are going to help you remodel your city?]

6. Probable Milestones

[List anticipated project milestones by month and year: How long is the project going to take you? What steps are you going to take in each month?]

7. Probable Cost and Funding Sources

[Provide rough-order-of-magnitude cost estimate and identification of who will fund. If available, identify the funding line to be used.]

Submit a draft proposal to Ms. Walls and Mrs. Scott by May 8, 2020

Part IV: Complete Human Body Systems Paper (See Part IV-Human Body Systems-Google Classroom)

- Note: One of the body systems must have a disease that is prevalent in your city/country. Please make sure you indicate that within your project.*
- Submit the Human Body Systems Paper to Dr. Ervin by May 11, 2020

Part V: Create a City Model (Poster needed)

Develop a plan on paper for your city first.

The city needs to include:

- City Name, Population
- At least **2 pairs of parallel** (4 Total) roads (named)
- At least **2 perpendicular** roads (named)
- At least **2 transversal** roads (named)
- Streets should be named using geometric terms

The following buildings must be placed as directed: **Buildings must be named**

- A house and a school on a pair of <u>consecutive interior angles</u> (address and named)
- A bank and a post office on a pair of corresponding angles (named)
- A grocery (or general store) and an electronics store on a pair of <u>alternate interior angles</u> (named)
- A movie theater and a Video Game shop on a pair of alternate exterior angles (named)
- A police station between the bank and the post office (named)
- A restaurant and a gas station creating a <u>linear pair or a supplementary angle</u> (named)
- A fire department and hospital on a pair of vertical angles (named)
- A Park at the location of your choice (named)

The Park must meet the following criteria:

- 1. It must be a square with an area of 400 square centimeters. (A=bh)
- 2. Within this square draw a round sandbox with a two-inch diameter.
- 3. Draw a rectangular swimming pool that has a perimeter of 10 centimeters
- 4. Draw a pond with a circumference of 6.28 inches
- 5. Finally, draw ag right scalene triangle for the picnic area
- At least 5 other homes at the location of your choice (include the address)
- 2 other buildings of your choice (named)
- There should be at least 5 angles measured and labeled through the city.

*Submit the final proposal with corrections to Mrs. Scott by May 13, 2020

Part VI: Oral Presentation

Final Project is due on Monday, May 13, 2020. Presentations will begin on May 18, 2020.

Standards:

Language Arts

- Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 20-22 above.) [W.7.4]
- Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources. [W.7.6]
- Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation. [W.7.7]
- Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation. [W.7.8]
- Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. [SL.7.6]
- Use knowledge of language and its conventions when writing, speaking, reading, or listening. [L.7.3]
- Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.* [L.7.3a]

Geography

- Explain how cultural features, traits, and diffusion help define regions, including religious structures, agricultural patterns, ethnic enclaves, ethnic restaurants, and the spread of Islam.
- Explain how human systems develop in response to physical environmental conditions.
- Determine political, military, cultural, and economic forces that contribute to cooperation and conflict among people.
- Illustrate how primary, secondary, and tertiary economic activities have specific functions and spatial patterns.
- Describe the world in spatial terms using maps and other geographic representations, tools, and technologies
- Explain the earth's population distribution based on earth's physical geography.

Learning Targets

- a) I can give examples of how physical geography influences agriculture, housing, transportation, economy and vegetation.
- b) Identify the cultural, political, and economic characteristics of selected regions of the Eastern Hemisphere and Europe.
- c) I can explain how development impacts a nation's demography.
- d) I can explain the economic effects of population growth and/or decline.
- e) I can identify the cultural, political, and economic characteristics of regions of Africa.

Science

• Standard-2. Construct models and representations of organ systems to demonstrate how multiple interacting organs and systems work together to accomplish specific functions.

Learning Targets:

- a) I can describe connections between the levels of organization (cells, tissues, organs, organ systems).
- b) I can explain the basic function of each system (e.g., circulatory, digestive, muscular, respiratory, skeletal, and nervous) and identify the main organs involved.

• Standard-8. Construct and use models to explain that genetic variations between parent and offspring occur as a result of genetic differences in randomly inherited genes and that additional variations may arise from alteration of genetic information.

Learning Target:

a) I can construct an explanation from evidence to describe how genetic mutations result in harmful, beneficial, or neutral effects to the structure and function of an organism.

Math

Geometry: Draw, construct, and describe geometrical figures and describe the relationships between them.

- [7-G1] Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.
- [7-G2] Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.

 Solve real-world and mathematical problems involving angle measure, area, surface area, and volume.
- [7-G5] Use facts about supplementary, complementary, vertical, and adjacent angles in a multistep problem to write and solve simple equations for an unknown angle in a figure.
- [7-G6] Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.