# 8th GRADE WARM-UP 15 MINUTES

Google

# PASSPORT WARM-UP - 8th GRADE

## GOOGLE EARTH USAGE OVERVIEW:

Teachers can use <u>I'm Feeling Lucky</u> and <u>Street View</u> in Google Earth to randomly select a location in the world and **relate it to multiple content areas**. Teachers can also choose to preselect a location that lends itself well to relevant standards and objectives using <u>Search</u> or <u>Voyager Stories</u>.

### LESSON SUMMARY:

- Passport Warm Up is an engaging daily routine in which students **review** geography, math, science, social studies, ELA and current events objectives.
- This activity is designed to be **independent practice** for students that requires minimal to no direct instruction on the part of the teacher.
- Teachers can choose from the standards based example questions listed below, or use them as inspiration to generate their own questions.
- To stay within the 15 minute time frame, teachers should use 1-2 questions per subject.

### LEARNING OBJECTIVES:

- Students will engage in **daily review** of eighth grade geography, math, science, social studies, ELA and current events concepts.
- Objectives will vary widely based on teacher determined review concepts.

# SUGGESTED STANDARDS 8th GRADE

### GFOGRAPHY:

Geography Essential Elements and Standards, Grade 8,The World in Spatial Terms, Standard 1- How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information.

Geography Essential Elements and Standards, Grade 8, Geographic Skill 4-Analyzing geographic information.

Geography Essential Elements and Standards, Grade 8, Physical Systems, Standard 7- The physical process that shape the patterns of Earth's surface.

### MATH:

CCSS.MATH.CONTENT.8.SP.A.4- Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?

CCSS.MATH.CONTENT.8.F.B.4- Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

<u>CCSS.MATH.CONTENT.8.EE.A.4</u>- Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology

CCSS.MATH.CONTENT.8.EE.A.3- Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as 3 times 10<sup>8</sup> and the population of the world as 7 times 10<sup>9</sup>, and determine that the world population is more than 20 times larger.

# SUGGESTED STANDARDS 8th GRADE Continued

### SCIENCE:

NGSS.MS-LS1-4- Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

NGSS.MS-LS1-5- Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

NGSS.MS-LS2-1- Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

NGSS.MS-LS2-3- Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

NGSS.MS-ESS1-1- Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.

### SOCIAL STUDIES:

<u>CCSS.ELA-LITERACY.RH.6-8.7</u>- Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

CCSS.ELA-LITERACY.RH.6-8.8- Distinguish among fact, opinion, and reasoned judgment in a text.

\*Additional social studies standards vary state by state.

### ELA:

CCSS.ELA-LITERACY.W.8.1- Write arguments to support claims with clear reasons and relevant evidence

<u>CCSS.ELA-LITERACY.W.8.2</u>- Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

<u>CCSS.ELA-LITERACY.W.8.3</u>- Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.

<u>CCSS.ELA-LITERACY.W.8.7</u>- Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

# PASSPORT WARM UP - 8th GRADE

TIME:	15 minutes
MATERIALS NEEDED:	<ul> <li>Access to Google Earth "I'm Feeling Lucky"/Voyager.</li> <li>Student copies of Passport Warm Up Student Response Template.</li> </ul>
IMPLEMENTATION GUIDE:	<ol> <li>Select the subjects, standards and questions that are appropriate to your class.</li> <li>Provide each student in your class with a copy of the Passport Warm Up Student Response Template (below).</li> <li>Use I'm Feeling Lucky to "roll the dice" and randomly select a location in the world OR pre-select a location using Search or a Voyager Story.</li> <li>Students respond to the questions using a print out of the Student Response Template (below) OR teachers can share the Student Response Template using Google Classroom.</li> <li>When relevant, use Street View, Google Search and Wikipedia to gather the information needed for students to answer the questions about that location. Students can work independently or with a partner to search for information needed.</li> <li>Allow time for students to share their answers with the class.</li> <li>Quick Tip: Track your classroom's "travels" using Google Tour Builder!</li> </ol>
CREDITS:	Written by Sarah Schwartz Johnson.

<sup>\*</sup>Note - this template is designed for teachers to modify for use with their grade level and standards.

# STANDARDS BASED EXAMPLE QUESTIONS

### **GEOGRAPHY:**

- Analyze this location for it's access to water resources. Does this location have access to sea water, fresh water or both? Will water access be problematic in the future?
- (<u>Select Map Style: Clean</u>) What is the purpose of this map? What information can we gain from studying it? (<u>Select Map Style: Exploration</u>) What is the purpose of this map? What information can we gain from studying it? (<u>Select Map Style: Everything</u>) What is the purpose of this map? What information can we gain from studying it?
- Describe the physical characteristics of this location. How have environmental patterns influenced this landscape?
- Are the effects of climate change evident in this location? Give examples to support your reasoning.
- Use cardinal directions to describe this location's position relative to where you live. Be precise.

### MATH:

- What is the population of this location? Express the population using scientific notation.
- What is the population of this location? Approximately how many times larger is the population of the world (7,600,000,000).
- What is the area of this location in square feet? Convert the area to square inches. Express your answer using scientific notation.
- What is the currency of this location? What is the conversion rate to \$USD? Find a function that relates the number of \$USD to the value of the currency in this location.
- Work with a partner to brainstorm a list of topics to gather categorical data for this location (i.e. rainfall per month, gas prices per month, movie tickets sold per month, etc.) Then, choose two unrelated topics that you predict would show evidence of an association and explain your reasoning. (Extension: research actual data and test your hypothesis!).

### SCIENCE:

- Research an example of a plant or animal in this location and describe a specific behavior that increases its odds of survival in this environment.
- Research one specific example of how the environmental factors of this location contribute to the growth of an organism (plant or animal).
- Research an example of an organism whose population is currently being threatened or is already extinct in this location. Identify the environmental factors that caused the decrease in population.
- Research an example of a food web in this location that includes at least one producer, consumer and decomposer represented.
- Refer to your model of the Earth-sun-moon system and this location's position on the Earth to determine what season it will be in the month of December. Explain your reasoning.

# STANDARDS BASED **EXAMPLE QUESTIONS CONTINUED**

### SOCIAL STUDIES:

- Research key events in the history of this location. Create a timeline highlighting 10 events in chronological order.
- Research the type of government that is used in this location. Compare and contrast it to the government where you live.
- Research the most commonly practiced religion from this location. Write an objective summary of your findings.
- · Research the country of this location and its involvement in war. Create a timeline highlighting the country's history of conflict.
- What transportation services are available in this location? What can you infer about this location's interaction with the surrounding regions based on the transportation offered?

### ELA:

- Research an important historical figure from this location or region and write a short summary of their contribution and its significance.
- Write a dialogue between two people in this location. Use location specific details and sensory descriptions.
- Write an argument piece about why this location would be a good place to live. Provide a minimum of three reasons to support your claim.
- What adjective best describes this location? Why? Write a synonym and an antonym for this word.
- Write a journal entry from the perspective of person living in this location. Tell about your day using location specific detail and sensory descriptions.

- CURRENT EVENTS: Research the latest news in this location. Write a paragraph telling about the event and why it is newsworthy.
  - · Research the latest news in this location. What information can you infer about the demographics of a place based on the local news? (Is it urban, suburban or rural? Is the community working class, middle class or wealthy? etc.)
  - Research the biggest challenges facing this location. How are they similar to those facing the community in which you live? How are they different?
  - Write one fact and one opinion about this location.
  - Imagine you are a local news reporter. Write a list of topics you would be interested in investigating in this location.

### STUDENT RESPONSE TEMPLATE:

### Welcome to:

GEOGRAPHY	
MATH	
SCIENCE	
SOCIAL STUDIES	
ELA	
CURRENT EVENTS	