

## Why Cities Are Where They Are

Author Grade Level Duration Jim White and others 2

1 class period

### **National Standards**

### GEOGRAPHY Element 4: Human Systems

12. The processes, patterns, and functions of human settlement

### **AZ Standards**

# MATHEMATICS Measurement and Data

1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, takeapart, and compare problems using information presented in a bar graph.

#### **Arizona Social Science Standards**

#### **GEOGRAPHY**

The use of geographic representations and tools help individuals understand their world.

1.G1.1 Use, explore and construct maps, graphs, and other geographical representations to support content focus. Key concepts include but are not limited to physical features (rivers, lakes, mountains, landforms, desert) and human features (dams, cities, parks, hospitals, schools, railroad tracks, farms, factories, houses). 2.G1.1 Use and construct maps, graphs, and other geographic representations of familiar and unfamiliar places in the world; and locate physical and human features. Key physical features include but are not limited to seven continents, oceans, lakes, rivers, mountain ranges, coasts, seas, and deserts. Key human features include but are not limited to equator, hemispheres, North and South Pole, cities, states, countries, regions, and landmarks 2.G1.1 Use maps, globes, and other simple geographic models to identify and explain cultural and environmental characteristics of places in the world based on stories shared. **Human-environment interactions are** essential aspects of human life in all societies.

2.G2.1 Explain how weather, climate, and other environmental characteristics affect people's lives in a place or region being studied.

Examining human population and movement helps individuals understand past, present, and future conditions on Earth's surface.

1.G3.1 Explain why and how people, goods, and ideas move from place to place. Key concepts include but are not limited to transportation, immigration, education, technology, and natural resources.

### **Overview**

We usually build cities and houses in places that are best suited to our human needs. Students will see how many U.S. cities were built at certain locations because of the physical features of the environment.

### **Purpose**



### Why Cities Are Where They Are

In this lesson, students will gain an understanding of the relationship between physical features and the location of human activity by creating pictograms.

#### **Materials**

- Rivers and Cities in the United States map

  1 copy per student and transparency for teacher.
- Why Cities Are Where They Are Activity Worksheet and Answer Key
- Blue colored pencils
- A Good Place for a City by Stevie Prince
- Materials to construct a class pictograph (white board or chart paper and markers or document camera)

### **Objectives**

The student will be able to:

- Understand maps showing water bodies and cities.
- 2. Identify cities in the U.S. and discuss why these cities are located where they are.
- 3. Practice graphing activities.

### **Procedures**

Prerequisite knowledge: Students need to have knowledge of bodies of water and how to find water bodies on a map. They should know how to construct and interpret a pictograph.

- 1. Review the elements of water bodies (rivers, oceans, and lakes) and how to find these on a map. 2. Read aloud the book, *A Good Place for a City* by Stevie Prince or a similar book with this theme. Discuss the possible reasons for the location of cities. For instance, cities are built by a river for transportation, fresh water, industry, and agriculture; by a lake for fresh water and agriculture; and by an ocean for fishing and transportation.
- 3. Project the Rivers and Cities in the United States map and distribute paper copies to students. Have students identify the bodies of water using a blue colored pencil.
- 4. As a class, determine the symbol for a city and have students draw it in the box on the worksheet. Either as a whole class or working in groups, have students complete the student worksheet on the location of cities and answer the questions concerning more, less, etc.
- 5. Have students take the pictograph and turn it into a bar graph.

### **Assessment**

The student worksheet can be used for assessment. Math will be assessed with questions 1-4 (5 points) and geography with questions 5-6 (5 points). Mastery will be considered 80% or higher.

The bar graph can be graded for completeness (title and labels) and accuracy. Mastery will be considered 80% or higher.

#### **Extensions**

Have students look at a map of Arizona cities and see which cities are located by rivers or by lakes.

Identify the physical features of a city near the school.

### Sources

A Good Place for a City by Stevie Prince. National Geographic Society, ISBN 0-7922-4369-2

