Riddle Me This

Knowledge of map skills helps students solve map riddles.

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### National Geography Standards

**Element One: The World in Spatial Terms**

1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.

### Arizona Geography Strand

**CONCEPT 1 World in Spatial Terms**

**GRADE 4**

**PO 2.** Interpret political and physical maps using the following map elements:

- title
- compass rose (cardinal and intermediate directions)
- symbols
- legend
- scale
- road map index
- grid (latitude and longitude)

### Other Arizona Standards

**Mathematics Common Core Standards Measurement and Data**

4.MD.2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

### Overview

Reading a political map is a basic geographic skill used in daily life. Students will use their own map reading skills to test other students’ skills.

### Purpose

In this lesson, students will choose places on a political map of the United States for which they will create riddles. The riddles will incorporate clues with cardinal (north, south, east, west) and intermediate (i.e., northwest, southeast) directions as well as mileage using the scale of the map.

### Materials

- Political maps of the United States (sources vary: wall map, atlas, textbook, Internet, desktop maps)
- Rulers for measuring standard U.S. measurement
- Teacher’s Guide Sheet with sample riddles
- Riddle Worksheet (for students)
- Riddle Quiz and Teacher’s Key

### Objectives

The student will be able to:

1. Read a political map and locate states and cities.
2. Use cardinal and intermediate directions on a map.
3. Measure distances on a map using the mileage scale.
4. Use a mileage scale on a political map to locate places relative to other locations.
5. Formulate clues for a riddle using the above cited map skills.

**Procedures**

*Prerequisite geography skill: knowledge of cardinal and intermediate directions on a map. Prerequisite math skill: ability to use a map mileage scale.*

1. Choose a location on the map and tell the students clues about the location.

2. The students must guess your location on the map from the clues. They are not allowed to ask questions, they can only use the clues given. They may write down any information they need to determine the location.

3. Model a riddle for the class using the Teacher’s Guide Sheet. As each clue is given, have the students make guesses as to where you are located on the map. For each successive clue narrow down the choices until they guess the correct location. This procedure will assist the students in using the process of elimination to correctly guess the riddles.

4. If needed, assign a student to give clues to the class as an additional model before starting the activity.

5. For additional guidance, model making clues for a riddle.

6. Students will write down their clues as well as the location on the worksheet. (Modification: students may work in partners to create clues for their riddle.)

7. Riddles can be shared in either whole group or small group settings.

8. Student will then complete the Riddle Quiz.

**Assessment**

Students will complete the riddle quiz with 80% accuracy.

**Extensions**

- Use locations throughout the world rather than the United States.
- Use locations throughout the world rather than the Arizona.
- Incorporate latitude and longitude in the clues.
- Create a bulletin board for weekly or daily riddles to be displayed.
- Incorporate landmarks, cultural, and any other aspect of geography as addressed in social studies curriculum.
- Assign each student a mystery location that is taped to his or her back. The student does not know the identity of the location and must guess by asking their classmates questions that can be answered by “yes” or “no.” (For example: Am I on the Asian continent?)

**Sources**