

Grade 4 Unit 6

Lesson 24

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Unit 6 Lesson 24: Assess the Reasonableness of Solutions

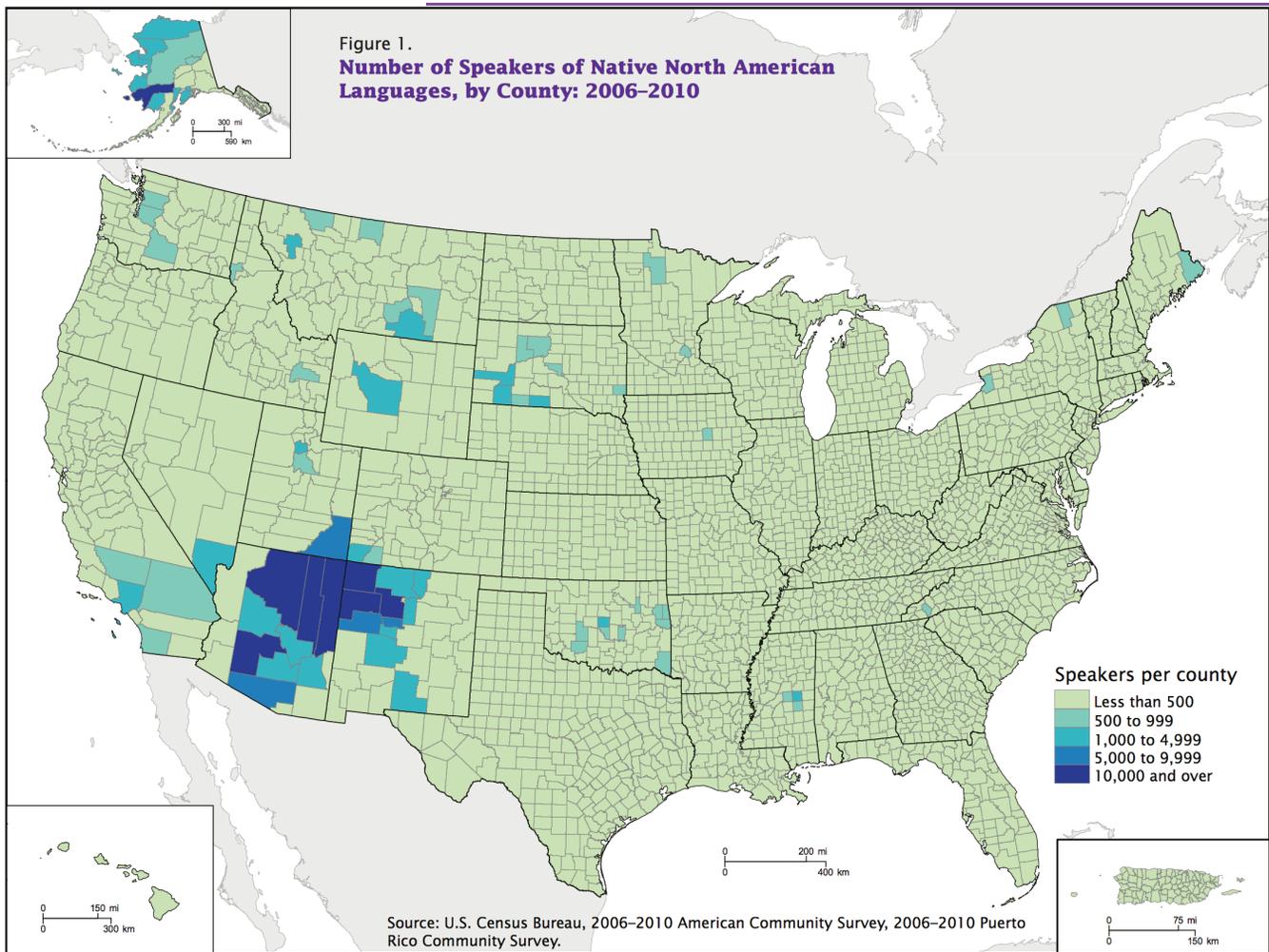
WU Notice and Wonder: Native American Languages (Warm up)

Student Task Statement

What do you notice and what do you wonder?



Activity Synthesis



1 Do You Speak Navajo?

Student Task Statement

- In the list of the ten most widely spoken Native American languages in the U.S., Navajo and Yupik are the most widely spoken.
 - How many more Navajo speakers are there than Yupik speakers? Show your reasoning.

language	number of speakers
Navajo	166,826
Yupik	19,750
Dakota	17,855
Apache	13,445

language	number of speakers
Keres	13,190
Cherokee	11,465
Ojibwa	9,735
Choctaw	9,635
Zuni	9,615
Pima	6,990

- b. About how many times as many Navajo speakers as there are Yupik speakers? Show your reasoning.
2. Navajo, Apache, and Cherokee languages have been used during wartime to help the U.S. military keep its communications secure and incomprehensible to their enemies.
 - a. Based on the data here, how many people might have been able to understand the communications? Show your reasoning.
 - b. How do you know that your answer is reasonable?
3. Are there more Navajo speakers than the speakers of all the other nine languages combined? Explain or show how you know.

2 Languages in Philadelphia and Chicago

Student Task Statement

Philadelphia, the birthplace of the United States, is a diverse city and home to people of different backgrounds.

The table shows 2017 data on some types of languages spoken in Philadelphia and the numbers of people who speak them.

language	number of speakers in Philadelphia
English only	1,224,539
Spanish	127,352
Other Indo-European	6,750
Asian	364

1. Based on the data, are there more people in Philadelphia who only speak English or more people who

speak a language other than English? Show how you know.

2. What is the difference between the number of people who speak only English and those who speak another language? Show how you know.
3. Chicago is a city with a similar population to Philadelphia.

This table shows data on some types of languages spoken by people in Chicago.

language	number of speakers in Chicago
English only	1,731,836
Spanish	422,568
Other Indo-European	25,777
Asian	1,005

- a. How many more speakers of Spanish and other Indo-European languages are in Chicago than in Philadelphia? Show your reasoning.
- b. How do you know your answer is reasonable?