

## Weekly Concept Into the Past



### Essential Question

How do we explain what happened in the past?



**Go Digital!**



# Pieces of the Puzzle

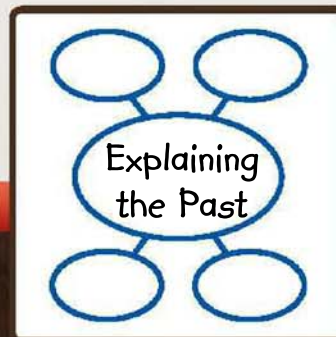
People like me all over the world excavate and study remnants of the past to learn where we came from.

- ▶ At the site of an ancient temple in Luxor, Egypt, I am trying to reconstruct a broken pottery plate.
- ▶ Artifacts like this help us understand how people lived, what technology they had, and what problems they may have experienced. From this, we may gain an insight into our own future!

## Talk About It



Write words you have learned about things that help us explain the past. Then talk about something in the past that you would like to have explained.





# Vocabulary

Use the picture and sentences to talk with a partner about each word.

## archaeologist



An **archaeologist** examines ancient places for clues about early cultures.

What early culture would you investigate if you were an archaeologist?

## era



The people sitting for the photograph wore clothes from an earlier **era**.

If you could time-travel to another era, which would you choose?

## fragments



The dropped pottery vase was in **fragments** on the floor.

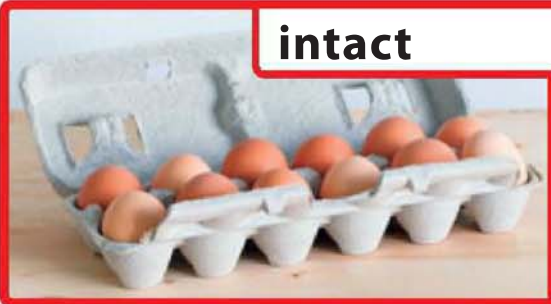
What fragments of objects have you found?

## historian



A good **historian** finds interesting stories by studying past objects and events.

What would a future historian tell about the time you live in?



## intact

Cardboard cartons help protect eggs so they arrive at the store whole and **intact**.

What would you like to find intact after a storm or flood?



## preserved

Foods from our garden have been **preserved** in jars for enjoying all year.

Which of your possessions would you want preserved in a time capsule?



## reconstruct

A skilled craftsman can **reconstruct** broken china so that it looks like new.

What famous place would you like to reconstruct as a model?



## remnants

Divers discovered the **remnants** of a sunken ship.

What could someone learn from the remnants of a meal?

## Your Turn

COLLABORATE



Pick three words. Write a question about each one for your partner to answer.

**Go Digital!** Use the online visual glossary





### Essential Question

How do we explain what happened in the past?

Read two different views about the uses of a mysterious object.

The Inca Empire was centered in what is now Peru. It was taken by Spanish conquest in the middle of the 16th century.



# What Was the Purpose of the Inca's **STRANGE STRINGS?**



## String Theory

*Was the quipu an ancient mathematical calculator?*

**M**ost of us do not do math problems without an electronic calculator. It would be even tougher without paper and pencil. Now imagine adding numbers with a device that looks like a mop! The quipu (pronounced KWEE-poo) was an invention of the Incas, an ancient civilization in South America. Most quipus were not **preserved**, but about 600 of them still remain **intact**.

Quipus are made of cotton and wool strings, sometimes hundreds of them, attached to a thicker horizontal cord. Both the **archaeologist** and the **historian** have tried to figure out how the quipu works. Here is their solution:



**The quipu is an object that has baffled archaeologists for many years.**

Knots were tied to the dangling strings to represent numbers.

The quipus were likely used by Inca officials to record and keep track of data, including statistics on anything from the number of crops produced by a village to the number of people living in a house.

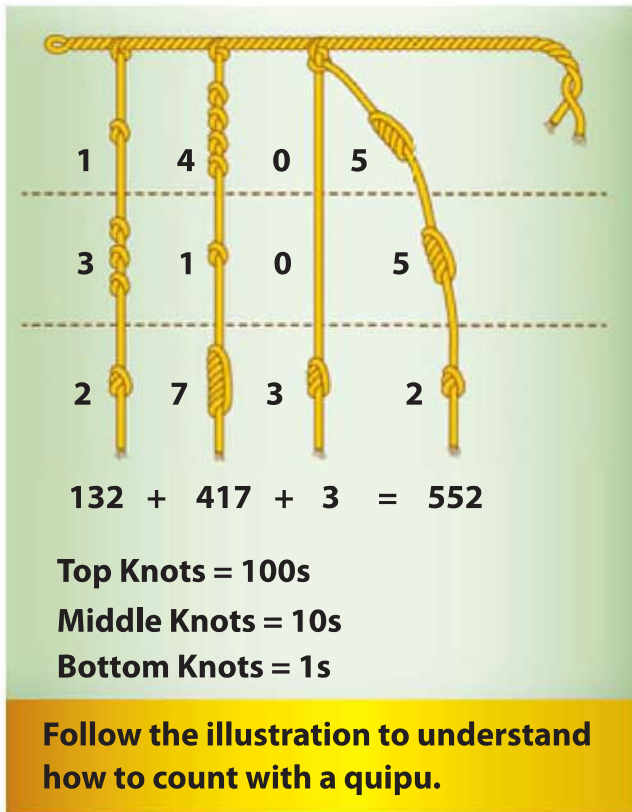


## Spinning a Yarn

*The Incas had a 3-D language written in thread!*

**M**ystery surrounds the Inca civilization. In its peak **era**—the middle of the 1400s—the Incas built thousands of miles of roads over mountains, and yet they had no knowledge of the wheel. They made houses of stone blocks that fit together perfectly without mortar, a bonding material. The biggest mystery may be how the Incas kept their empire together without a written language.

The solution to the last mystery might be an odd-looking object called a quipu. Only a few hundred of these **remnants** of the Inca culture still exist.



Here is how a quipu would work: Each group of knots on a string represents a power of 10. Depending on their position, knots can stand for ones, tens, hundreds, and thousands. Clusters of knots increase in value the higher they are on the string. As a result, Incas with special training could add up the knots on a string to get the sum. They could also add up the total of many strings or even many quipus.

The patterns of the knots show repeating numbers. When you add it all up, it seems clear that the quipu was nothing less than an amazing low-tech calculator.

**Researchers discuss a quipu.**



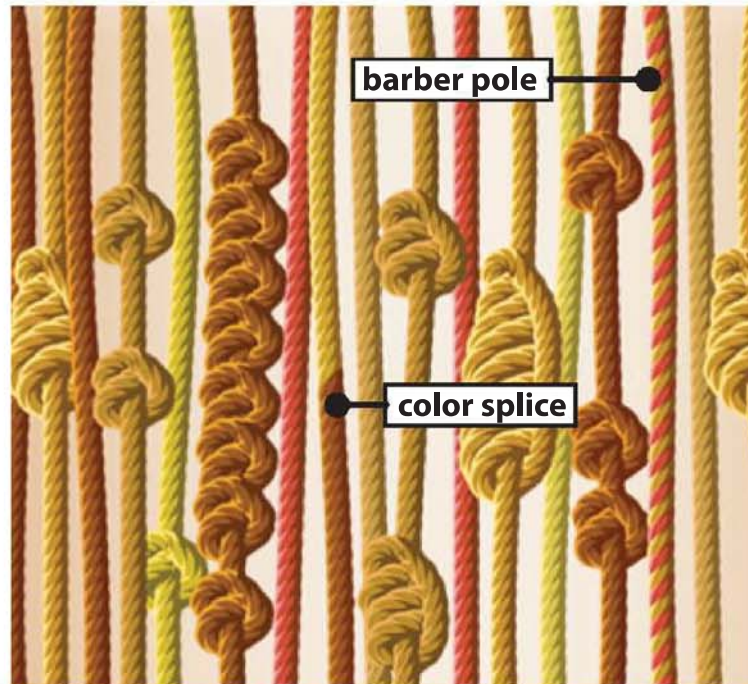


Quipus are made of wool strings that hang from a thick cord. On the strings are groups of knots. Many researchers believe the knots stand for numbers—even though no evidence supports this. But others make a strong case that the knots of the quipu were really language symbols, or a form of language.

Researchers found an identical three-knot pattern in the strings of seven different quipus. They think the order of the knots is code for the name of an Incan city. They hope to **reconstruct** the quipu code based on this and other repeating patterns of knots.

More conclusive proof that the quipu is a language comes from an old manuscript, a series of handwritten pages from the 17<sup>th</sup> century. It was found in a box holding **fragments** of a quipu. The author of the manuscript says the quipus were woven symbols. The manuscript even matches up the symbols to a list of words.

The Inca empire covered nearly 3,000 miles. Perhaps the strings of the quipu helped hold it together.



**Some experts now believe that the quipu's knots, colors, and patterns made it more than just a counting device. Decoding the quipu may reveal historical records.**

## Make Connections



Talk about what historians found by studying the ancient quipu. **ESSENTIAL QUESTION**

Think about an object that confused you the first time you saw it. How did you find out what it was for? **TEXT TO SELF**