Sumerian Achievements

If YOU were there...
You are a student at a school for scribes in Sumer. Learning all the symbols for writing is very hard. Your teacher assigns you lessons to write on your clay tablet, but you can’t help making mistakes. Then you have to smooth out the surface and try again. Still, being a scribe can lead to important jobs for the king. You could make your family proud.

Why would you want to be a scribe?

BUILDING BACKGROUND  Sumerian society was advanced in terms of religion and government organization. The Sumerians were responsible for many other achievements, which were passed down to later civilizations.

The Invention of Writing
The Sumerians made one of the greatest cultural advances in history. They developed cuneiform (kyoo-NEE-uh-fohrm), the world’s first system of writing. But Sumerians did not have pencils, pens, or paper. Instead, they used sharp tools called styluses to make wedge-shaped symbols on clay tablets.

Sumerians wrote on clay tablets with a special tool called a stylus.
Earlier written communication had used **pictographs**, or picture symbols. Each pictograph represented an object, such as a tree or an animal. But in cuneiform, symbols could also represent syllables, or basic parts of words. As a result, Sumerian writers could combine symbols to express more complex ideas such as “joy” or “powerful.”

Sumerians first used cuneiform to keep business records. A **scribe, or writer**, would be hired to keep track of the items people traded. Government officials and temples also hired scribes to keep their records. Becoming a scribe was a way to move up in social class.

Sumerian students went to school to learn to read and write. But, like today, some students did not want to study. A Sumerian story tells of a father who urged his son to do his schoolwork:

> “Go to school, stand before your ‘schoolfather,’ recite your assignment, open your schoolbag, write your tablet . . . After you have finished your assignment and reported to your monitor [teacher], come to me, and do not wander about in the street.”

—Sumerian essay quoted in *History Begins at Sumer*, by Samuel Noah Kramer

In time, Sumerians put their writing skills to new uses. They wrote works on history, law, grammar, and math. They also created works of literature. Sumerians wrote stories, proverbs, and songs. They wrote poems about the gods and about military victories. Some of these were **epics**, long poems that tell the stories of heroes. Later, people used some of these poems to create *The Epic of Gilgamesh*, the story of a legendary Sumerian king.

**REVIEW CHECK**  **Generalizing** How was cuneiform first used in Sumer?
Advances and Inventions
Writing was not the only great Sumerian invention. These early people made many other advances and discoveries.

Technical Advances
One of the Sumerians’ most important developments was the wheel. They were the first people to build wheeled vehicles, including carts and wagons. Using the wheel, Sumerians invented a device that spins clay as a craftsperson shapes it into bowls. This device is called a potter’s wheel.

The plow was another important Sumerian invention. Pulled by oxen, plows broke through the hard clay soil of Sumer to prepare it for planting. This technique greatly increased farm production. The Sumerians also invented a clock that used falling water to measure time.

Sumerian advances improved daily life in many ways. Sumerians built sewers under city streets. They learned to use bronze to make stronger tools and weapons. They even produced makeup and glass jewelry.

Math and Sciences
Another area in which Sumerians excelled was math. In fact, they developed a math system based on the number 60. Based on this system, they divided a circle into 360 degrees. Dividing a year into 12 months—a factor of 60—was another Sumerian idea. Sumerians also calculated the areas of rectangles and triangles.

Sumerian scholars studied science, too. They wrote long lists to record their study of the natural world. These tablets included the names of thousands of animals, plants, and minerals.

The Sumerians also made advances in medicine. They used ingredients from animals, plants, and minerals to produce healing drugs. Items used in these medicines included milk, turtle shells, figs, and salt. The Sumerians even catalogued their medical knowledge, listing treatments according to symptoms and body parts.

READING CHECK Categorizing What areas of life were improved by Sumerian inventions?

The Wheel
Do you realize how much the achievements of ancient Sumer affect your life today—and every day? For instance, try to imagine life without the wheel. How would you get around? Look at the streets outside. The cars, trucks, and buses you see are all modern versions of Sumerian wheeled vehicles. Wheelchairs, bicycles, and in-line skates all depend on wheels as well. Even modern air travel owes a large debt to the Sumerians. As impressive as jets are, they could never get off the ground without their wheels!

Like the Sumerians we use a base-60 system when we talk about 60 seconds in a minute and 60 minutes in an hour.

ANALYSIS SKILL ANALYZING INFORMATION
Generalizing Why is the wheel so important to modern society?
The Sumerians’ skills in the fields of art, metalwork, and architecture—the science of building—are well known to us. The ruins of great buildings and fine works of art have provided us with wonderful examples of the Sumerians’ creativity.

**Architecture**

Most Sumerian rulers lived in large palaces. Other rich Sumerians had two-story homes with as many as a dozen rooms. Most people, however, lived in smaller, one-story houses. These homes had six or seven rooms arranged around a small courtyard. Large and small houses stood side by side along the narrow, unpaved streets of the city. Bricks made of mud were the houses’ main building blocks.

City centers were dominated by their temples, the largest and most impressive buildings in Sumer. A *ziggurat*, a pyramid-shaped temple tower, rose above each city. Outdoor staircases led to a platform and a shrine at the top. Some architects added columns to make the temples more attractive.

**The Arts**

Sumerian sculptors produced many fine works. Among them are the statues of gods created for temples. Sumerian artists also sculpted small objects out of ivory and rare woods. Sumerian pottery is known more for its quantity than quality. Potters turned out many items, but few were works of beauty.

Jewelry was a popular item in Sumer. The jewelers of the region made many beautiful works out of imported gold, silver, and gems. Earrings and other items found in the region show that Sumerian jewelers knew advanced methods for putting gold pieces together.

Cylinder seals are perhaps Sumer’s most famous works of art. These small objects were stone cylinders engraved with designs. When rolled over clay, the designs would leave behind their imprint. Each seal left its own distinct imprint. As a result, a person could show ownership of a container by rolling a cylinder over the container’s wet clay surface. People could also use cylinder seals to “sign” documents or to decorate other clay objects.
The Sumerians were the first people in Mesopotamia to build large temples called ziggurats.

Some seals showed battle scenes. Others displayed worship rituals. Some were highly decorative, with hundreds of carefully cut gems. They required great skill to make.

The Sumerians also enjoyed music. Kings and temples hired musicians to play on special occasions. Sumerian musicians played reed pipes, drums, tambourines, and stringed instruments called lyres. Children learned songs in school. People sang hymns to gods and kings. Music and dance provided entertainment in marketplaces and homes.

**READING CHECK**

**Drawing Inferences** What might historians learn from cylinder seals?

**SUMMARY AND PREVIEW** The Sumerians greatly enriched their society. Next you will learn about the later peoples who lived in Mesopotamia.

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**Section 3 Assessment**

**Reviewing Ideas, Terms, and People**

1. **a. Identify** What is cuneiform?
   **b. Analyze** Why do you think writing is one of history’s most important cultural advances?
   **c. Elaborate** What current leader would you choose to write an epic about, and why?

2. **a. Recall** What were two early uses of the wheel?
   **b. Explain** Why do you think the invention of the plow was so important to the Sumerians?

3. **a. Describe** What was the basic Sumerian building material?
   **b. Make Inferences** Why do you think cylinder seals developed into works of art?

**Critical Thinking**

4. **Identifying Effects** In a chart like this one, identify the effect of each Sumerian advance or achievement you listed in your notes.

<table>
<thead>
<tr>
<th>Advance/Achievement</th>
<th>Effect</th>
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<tbody>
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**Focus on Writing**

5. **Evaluating Information** Review the Sumerian achievements you just read about. Then create a list of Sumerian achievements for your letter. Would this list replace some of the information you collected in Section 2?
The Epic of Gilgamesh

translated by N. K. Sandars

About the Reading The Epic of Gilgamesh is the world’s oldest epic, first recorded—carved on stone tablets—in about 2000 BC. The actual Gilgamesh, ruler of the city of Uruk, had lived about 700 years earlier. Over time, stories about this legendary king had grown and changed. In this story, Gilgamesh and his friend Enkidu seek to slay the monster Humbaba, keeper of a distant forest. In addition to his tremendous size and terrible appearance, Humbaba possesses seven splendors, or powers, one of which is fire. Gilgamesh hopes to claim these powers for himself.

AS YOU READ Notice both the human qualities and the godly qualities of Gilgamesh.

Humbaba came from his strong house of cedar. He nodded his head and shook it, menacing Gilgamesh; and on him he fastened his eye, the eye of death. Then Gilgamesh called to Shamash and his tears were flowing, “O glorious Shamash, I have followed the road you commanded but now if you send no succor how shall I escape?”

Glorious Shamash heard his prayer and he summoned the great wind, the north wind, the whirlwind, the storm and the icy wind, the tempest and the scorching wind; they came like dragons, like a scorching fire, like a serpent that freezes the heart, a destroying flood and the lightning’s fork. The eight winds rose up against Humbaba, they beat against his eyes; he was gripped, unable to go forward or back.

Gilgamesh shouted, “By the life of Ninsun my mother and divine Lugulbanda my father . . . my weak arms and my small weapons I have brought to this Land against you, and now I will enter your house.”

So he felled the first cedar and they cut the branches and laid them at the foot of the mountain. At the first stroke Humbaba blazed out, but still they advanced. They felled seven cedars and cut and bound the branches and laid them at the foot of the mountain, and seven times Humbaba loosed his glory on them. As the seventh blaze died out they reached his lair. He slapped his thigh in scorn. He approached like a noble wild bull roped on the mountain, a warrior whose elbows...
were bound together. The tears started to his eyes and he was pale, “Gilgamesh, let me speak. I have never known a mother, no, nor a father who reared me. I was born of the mountain, he reared me, and Enlil made me the keeper of this forest. Let me go free, Gilgamesh, and I will be your servant, you shall be my lord; all the trees of the forest that I tended on the mountain shall be yours. I will cut them down and build you a palace.” . . .

Enkidu said, “Do not listen, Gilgamesh: this Humbaba must die. Kill Humbaba first and his servants after.” But Gilgamesh said, “If we touch him the blaze and the glory of light will be put out in confusion, the glory and glamour will vanish, its rays will be quenched.” Enkidu said to Gilgamesh, “Not so, my friend. First entrap the bird, and where shall the chicks run then? Afterwards we can search out the glory and the glamour, when the chicks run distracted through the grass.”

Gilgamesh listened to the word of his companion, he took the ax in his hand, he drew the sword from his belt, and he struck Humbaba with a thrust of the sword to the neck, and Enkidu his comrade struck the second blow. At the third blow Humbaba fell. Then there followed confusion for this was the guardian of the forest whom they had felled to the ground . . .

When he saw the head of Humbaba, Enlil raged at them. “Why did you do this thing? From henceforth may the fire be on your faces, may it eat the bread that you eat, may it drink where you drink.” Then Enlil took again the blaze and the seven splendors that had been Humbaba’s: he gave the first to the river, and he gave to the lion, to the stone of execration, to the mountain . . .

O Gilgamesh, king and conqueror of the dreadful blaze; wild bull who plunders the mountain, who crosses the sea, glory to him.

ARCHAEOLOGISTS THINK THIS STATUE FROM THE 700S BC REPRESENTS GILGAMESH.

GUIDED READING

WORD HELP

execration a cursing
plunders takes by force

4 What effect does Humbaba hope his words will have on Gilgamesh?

5 The angry air-god Enlil curses the heroes for slaying Humbaba. He takes back the monster’s powers and gives them to other creatures and elements of nature.

In your opinion, is Gilgamesh more or less heroic for slaying Humbaba and angering Enlil?

CONNECTING LITERATURE TO HISTORY

1. Analyzing In Sumerian culture, the gods’ powers were thought to be enormous. According to this story, what roles do gods play in people’s lives?

2. Making Inferences Violence was common in Sumerian society. How does the character of Gilgamesh suggest that Sumerian society could be violent?