The god Enki said to Ziusudra, the king of Shuruppak:

"Listen to my instruction:
By our will a flood will sweep over the cities to destroy
the seed of mankind
And put an end to the rule of kings."

The next forty lines are missing from the original text, but a later version has these lines:

"Tear down your house, forget your belongings,
build a large ship and take with you the seed of all living creatures."

Ziusudra began work the next day
building a huge ship with seven decks sealed with bitumen.
He then loaded on gold, silver,
wild beasts and farm animals.
He loaded on his family, relations
and workmen and only then boarded up the hatch.
Then came the powerful wind from all Directions and attacked the land at once.
At the same time the flood swept the cities.
After the flood had covered the land for seven days and seven nights
And the huge boat had been tossed by the wind on the great waters,
The sun-god, Utu, came out."

SUMERIAN LEGEND
CLAY TABLET FROM NIPPUR
Why do civilizations create **legends**? Often, legends help to explain a major event in a people’s past or some mysterious aspect of their natural world. The Assyrian legend above, which suggests that a “great flood” took place in Mesopotamia, tries to address a mystery that dates from an early period in this civilization’s history. For a short time, clay tablet accounts of kings and their reigns ceased to be produced. What had happened to these kings? What had happened to the people of these city-states? How can this gap in Mesopotamian history be explained?

One possible explanation was that the god Enki had brought a great flood upon the people. As floods were common in Mesopotamia, the legend made sense to the people, even though it did not explain why the wrath of the god was unleashed. Archaeologists, however, have found no evidence to prove that a great flood ever swept over the city-states of Mesopotamia. It is more likely that the legend is based on several smaller floods, rather than on a single catastrophe.

Can you think of other flood legends or stories associated with other civilizations and their religions? How do the legends compare?

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**RELIGION**

**GODS AND GODDESSES**

The Mesopotamian people believed that their gods had the traits and appearances of human beings. In other words, their gods were **anthropomorphic**. Though immortal, they ate, drank, developed relationships, got married, and had children. They experienced and expressed human emotions such as anger, hate, jealousy, and love. When a flood struck the riverbank communities, it was not uncommon to believe that one of the gods was angry.

Religion in Mesopotamia was also **polytheistic**. That is, the people worshipped many different gods and goddesses. The Sumerians, for example, believed in over 3000 different deities. Each city-state also selected one of the gods as its personal patron, and the people believed the city belonged to that god.

As was the case in many other ancient civilizations, the main deities in Sumer were associated with aspects of nature. Four gods were considered superior to all others: Enlil, the god of air, whose city was Nippur; An, the god of heaven, whose city was Uruk; Enki, the god of earth and water, whose city was Eridu; and Ninhursag, the mother goddess of all living things, whose city was Lagash. Other important gods and goddesses were Utu, the sun god; Nannar, the moon god; and Innana, goddess of love.

In the Sumerian worldview, the gods lived in the skies or heavens and ruled over the earth. Below the earth was a gloomy underworld where the dead were entombed. The god Enlil provided the universal laws that governed everything in the universe, though he broke one of the laws himself and was banished for a time to the underworld. Enk provided all that made the earth rich, from the water in the rivers to the stalls for livestock. Humans were created from clay to serve the gods on earth and save them from the hard work of providing for their own food and shelter.

The Babylonians replaced many of the Sumerian gods with gods of their own, although their functions remained much the same. The goddess Ishtar, for example, replaced Innana, Marduk replaced Enlil, and Anu replaced An. The Babylonian
The pantheon also contained several lesser deities such as Apsu, god of fresh waters; Ti'amat, goddess of the sea; and Ea, the god of wisdom.

The Assyrians also recognized many of the same gods as the Sumerians, but worshipped as well a chief god, Ashur. Ashur was lord of heaven and earth and creator of the world. All of the Assyrian kings were closely associated with Ashur. One of the other most popular deities among the Assyrians was the mother goddess, Ishtar, the goddess of love.

**THEN AND NOW**

The Temple-Towers of Sumer

What role did the temples have in Sumerian society? What determined their unique shape? Since little of the temples remain today, how do you think historians are able to reconstruct what they actually looked like?

Some of the most fascinating remains of Sumerian civilization are the magnificent terraced temples called ziggurats. The Sumerians built their mountain-shaped temples, with a shrine at the very top, to house the gods while they visited the land of mortals. The ziggurat was always the most important architectural structure in any Sumerian city. In plain view of all citizens, it served as a reminder that the people were under the watchful eye of their gods.

In all likelihood, the temples were first built to raise the shrine above the level of the floodwaters. Over the centuries the Sumerians built them larger and larger. The ziggurat at Uruk, for example, constructed on a terrace 12 m high, was one of the oldest, though not one of the highest. Some archaeologists believe that this temple would have taken 1500 men five years to construct, an estimate that suggests Sumerian rulers could mobilize large numbers of people in the service of the gods.

The ziggurat at Ur, built by King Ur-Nammu in about 2110 BCE, was used for over 1500 years. Like most of these temples, it was constructed from thousands of sun-dried bricks. Burnt brick laid in bitumen mortar covered the entire outside. Rectangular at its base, the ziggurat measured 65 m by 45 m, and rose 30 m to the top of the shrine.

Construction likely took place in several stages. A staircase connected each section to the next. The final staircase rose to the shrine of Nanna, the city's god, situated at the pinnacle. There were no interior chambers.

Since the Sumerians intended the ziggurat to represent the far-off mountains where the gods lived, they might originally have planted trees on the terraces to more closely reflect the mountainous landscape.

Figure 3.4 shows the ziggurat of Ur that was excavated by the team of English archaeologists led by Sir Leonard Woolley. Unfortunately, mud brick weathers badly, and little of the original ziggurat remains today. The main structure is a reconstruction.

Figure 3.5 The ziggurat at Ur (reconstructed)
and fertility and the mistress of battle.

Although Mesopotamians believed that their gods lived in the heavens and in high places such as on the summits of mountains, they also believed that the deities came down to earth. To house them, they built high temples called ziggurats—terraced pyramids topped with a shrine—and dedicated these buildings to the gods' honour. Food was placed in the shrine daily for the gods to eat while they were in the temple.

**RELIGIOUS BELIEFS AND PRACTICES**

The Mesopotamian gods controlled all aspects of the human and natural world. They controlled the rains, the floods, the changing seasons, the fruitfulness of the harvest, and all other forces of nature. They could influence major human events, such as peace or war, and they could also affect events in individual lives, such as the success or failure of a business venture. They could bring good or ill fortune at will. The people were subject to the mysterious whims of the gods, but their religion also provided them with a sense of a universal order and explained some of the mysteries of life and the natural world.

The Sumerians, Babylonians, and Assyrians all created a strong mythology which told stories of the gods and their relationship to the world. This mythology also included tales of demons, who lived in the fearsome underworld and fought constant battles with the deities of good.

Since the gods and demons could bring good or ill fortune, the people were constantly on the lookout for omens of the future. Many consulted oracles or seers to interpret the signs of the gods. Liver divination was a popular method of interpretation because the liver was considered the seat of emotion and true knowledge. Priests sacrificed sheep and examined the lines, valleys, spots, and wrinkles on the liver to uncover the future.

Religious festivals were also frequent events in Mesopotamia. The New Year's festival, which could last for as long as 12 days, was the most popular and sacred. Almost the entire population of a city gathered to witness the ritual renewal of the earth's fertility and to celebrate the marriage of the city's god to the city. Festivals were also held when a city won a war to celebrate the capture of the conquered city's treasure. Competitions, games, and short plays telling stories of the gods were often part of the festivities.

**DEATH AND THE AFTERLIFE**

The people of Mesopotamia feared death. They believed that, once they died, they entered a bleak underworld that was a land of no return. Some sources refer to it as a place with seven walls and no gates, where the dead would live forever, alone and in darkness. Therefore, it was important for the dead to take their most treasured possessions along with them into the afterlife.

When a king died, the people's fear of death increased because they considered a ruler's death to be a bad omen for the future of the country. Mourning was officially observed throughout the land.

A deceased king being prepared for burial was sprinkled with perfumes, anointed with oils, and clad in his royal robes. He was then laid out in a huge rectangular stone chest, or sarcophagus, that had great rings inset in the sides so that cords or rods could be passed through to help move it. A lid was fixed in place with bronze bolts, and a curse label was attached to the outside to frighten away would-be grave robbers. Once the sarcophagus was buried along with a large treasure, usually inside the palace, sacrifices were made.

Leonard Woolley's discovery of the royal cemetery at Ur revealed that the Mesopotamians buried the servants of a dead king or queen in the tomb as well. The belief was that a royal person should not go on to the afterlife alone. In the later period, only statues of servants were buried in the tombs.

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**REFLECT AND ANALYZE**

1. a) Construct a diagram or chart identifying the main gods and goddesses of Sumer and their functions.
   
2. Define the term "myth." What role did mythology play in the religion of the ancient Mesopotamians?

3. You are a citizen of Mesopotamia. Describe your relationship to your gods, the religious practices you follow, and your view of the afterlife.

4. Construct a three-dimensional model of a Sumerian ziggurat. Explain the stages in construction and the ways in which the building was used.
SOCIAL ORGANIZATION

In Mesopotamia, the kings were at the pinnacle of the social pyramid. They derived their power from their position as head of the government, either as divinely ordained humans, as the Sumerians believed, or as actual gods on earth, as the Assyrians believed. Among all of the peoples of Mesopotamia, the word of the king was law.

Priests and scribes formed the upper class or nobility of Mesopotamian society. The priests were influential because of the importance of religion. Sumerians, for example, accepted that the priests were the only direct link with the gods of their cities. Priests were also influential because they controlled the distribution of land to farmers and ran the schools where scribes were educated.

Scribes, the educated class, were able to read and write. The Mesopotamians were one of the first civilizations to develop a system of writing. This development, which made it possible to record knowledge, brought great prestige to those who were educated. The scribes, primarily the sons of the wealthy, worked either for the temple, the palace, the government, or the army. Others worked for merchants or set up their own businesses as public writers.

The merchants and artisans were the traders and craftspeople. They helped to develop Mesopotamian civilization by exchanging products and ideas throughout the territory and beyond. They traded up and down the Tigris and Euphrates rivers, and their caravans ventured even farther afield to Egypt, Cyprus, and Lebanon. The artisans of Mesopotamia produced varied products such as gold rings, statuettes inlaid with lapis lazuli, and intricate shell containers used for holding coloured cosmetics. The evolution of a distinct merchants and artisans class, which allowed for specialization in the economy, was possible in Mesopotamia because of the stable food supply. Many historians point to specialization in areas other than farming as evidence of a true civilization.

The common people, who made up the lower class, earned their living from the land as farmers. Close family ties were important. Although the husband was the head of the family, women in Mesopotamia enjoyed more rights than in most other ancient civilizations.

Slaves, who performed household labour and various chores, were at the bottom of the social pyramid and had no rights. They were identified by a single name only; when they lost their freedom, their family name was taken away. Masters owned their slaves outright, and any slave caught trying to escape was beaten, branded, and put in chains. If a slave was injured, the master received the compensation—not the slave.

In Mesopotamia, there were two types of slaves. The first group included prisoners captured in battles against foreign cities; they were given as slaves to the temple or sold by auction to wealthy citizens. The second group included debtors who sold themselves, or members of their family, into slavery for a number of years to pay off the debt. In general, most masters treated their slaves well, but the slaves were expected to work long and hard.
REFLECT AND ANALYZE

1. What groups made up the upper classes of Mesopotamian society? How did they earn their prestigious positions?
2. Why were the artisans and merchants important in Mesopotamian society?
3. Write a brief first-person account describing a day in the life of a Mesopotamian priest, scribe, merchant, farmer, or slave. Argue that you are vitally important to the fabric of your society.

EVERYDAY LIFE

THE FAMILY

Throughout Mesopotamia, the family was considered important and the birth of a child was a welcome event. The father, as head of the family, had unlimited authority over his children. In fact, legal documents of the period describe the father as "master" or "owner" of his children. Legally, he could deposit any of his children with a creditor as security for repayment of a debt. Parental respect was the focus of a child's upbringing.

Women in Mesopotamia had more rights than women living in many other lands at the time. They were highly respected, could own land and property, and could also set up their own businesses. However, they could not vote or rule, and were not considered equal to men. In upper-class families, women stayed in a separate part of the house.

Traditionally, parents arranged marriages for their sons and daughters when their children were still in their teens. During the engagement ceremony, the future husband poured perfume on the head of his future bride and brought her presents. After that, she was considered a full member of her future husband's family. On the wedding day, the bride was delivered to her husband where he veiled her in the presence of witnesses and solemnly declared her to be his wife.

The newlyweds usually went to live in the household of the husband until he was old enough to set up a household of his own or, if the family was wealthy, until his father died and he was granted the estate. The bride brought with her a širqu or dowry as well as a trousseau (clothing, linens, etc.), both of which became the future property of her children. If the bride's father was rich enough, he gave her a gift of gold, silver, furniture, or slaves at the time of her engagement, and she was allowed to use this gift in any way she wished, including to set up her own business. This property remained hers even if her husband divorced her.

While monogamy was the rule among the people of Mesopotamia, some men took in secondary wives. The title "wife," however, was reserved for the legal wife alone. The secondary wives, sometimes referred to as concubines, were often members of the slave class and were tolerated within the household and society.

EDUCATION

At age eight or nine, boys of the wealthiest families began to attend school. Children from lower-class families were taught life skills at home. Boys learned a specific trade such as boat-building or brickmaking, and girls were trained as wives and mothers.

The school, constructed of brick with small windows near the roof, was called an...
**Urban and Rural Living**

What was life like in a Sumerian city-state? What would you see if you took a walk around Ur, Kish, or Lagash? The city-states in Sumer were surrounded by thick, high walls of mud brick. Inside the walls were a few broad streets, public squares, and bustling marketplaces. The temple, the most sacred building, was always located in the centre and served as the focus of most activities including craft industries and religious ceremonies.

The homes of lower-class Sumerians would probably have seemed quite simple. They were constructed of sun-dried earthen-brown bricks. A typical home featured a low door and a few windows covered with wooden grilles high up on the walls. An outside staircase led to a flat roof where people often slept on hot nights.

Inside was a single room, which was cool but poorly lighted. Decorations were limited to matting on the floor and woven blankets along the walls.

Wealthy urban Sumerians lived in more elaborate homes. We know more about their dwellings because they could afford to build with kiln-dried rather than sun-dried bricks. These more permanent materials have allowed archaeologists to determine more accurately what the homes were like.

A vestibule (passage) connected the home to the street. Off the vestibule was a large reception room for guests and a link to an open court, around which the house was built. The open court contained a well, an oven, and a grinding stone for making flour. Rooms for dining, sleeping, and leisure were located around the court.

In Assyria, the urban homes of the wealthy were similar to those in Sumer. Assyrian homes, however, may have been better decorated, with wall paintings, hangings, and fine rugs. Each room had a niche for lamps and for storing personal belongings. For the very well-to-do, lavatories were constructed with asphalt floors and drains, a testimonial to the excellent technology of the Assyrians.
Compared to houses in the cities, the rural homes of tenant farmers throughout Mesopotamia were very simple. Built close to the irrigated fields, each one was linked to the nearest neighbor by a well-beaten footpath. Because stone was very scarce for construction, the earliest rural dwellings were simple reed huts covered in mud. Later, sun-dried mud bricks were used to build somewhat more permanent dwellings. While these homes, with their flat roofs, were small and cheap to construct, residents had to live with the constant threat that they might collapse at any time!

Management of the household was the woman’s responsibility. Wealthy women had household slaves to help them with their daily routine. If there was no well in the courtyard, water had to be transported from the public well. In addition, grain had to be fetched from the granary, children had to be cared for, and food had to be prepared.

All the peoples of Mesopotamia shared a similar daily diet. Supper was the main meal of the day. In poorer homes, family members gathered on floor mats and ate with their fingers from an array of food set out in baskets and on pottery dishes. The wealthy usually dined at tables, eating from tableware that often included fine copper cups. A typical menu included staples such as baked fish, unleavened bread, goat’s milk, dates, honey, grapes, and other fruit. The wealthy could afford to add lamb, chicken, and pork to their diet. The common drinks were beer and date wine.

Banquets and feasts were popular forms of entertainment among all classes of Mesopotamians. The wealthy served lavish spreads of duck, deer, and roasted wild pork on huge copper platters, along with side dishes of fresh fruit and vegetables and loaves of bread. Even poor families enjoyed opportunities to host a feast. For the main dish, they generally offered dried or fresh fish dressed up for the occasion with a mixture of onions, cucumbers, apples, spices, cheese, and eggs.

**The Economy**

**AGRICULTURE**

*Little rain falls in Mesopotamia, enough, however, to make the corn begin to sprout, after which the plant is nourished and the ears formed by means of irrigation from the river. For the river does not, as in Egypt, overflow the corn-lands of its own accord, but is spread over them by the hand, or by the help of engines [invention]. The whole of Babylonia is, like Egypt, intersected with canals. Of all the countries that we know there is none which is so fruitful in grain. It makes no pretention indeed of growing the fig, the olive, the vine, or any other tree of the kind; but in grain it is so fruitful as to yield commonly two hundred fold, and when the production is the greatest, even three hundred fold.*

*The Persian Wars*

*Herodotus*  
(Greek historian, fifth century BCE)
In this excerpt, the Greek historian Herodotus shows his amazement at the grain yields that farmers in Babylonia were able to produce, in spite of the environmental obstacles. The farmers had to control the floodwaters of the rivers and irrigate the lands to produce sizeable crop yields.

The fertile banks of the Tigris and Euphrates produced three main crops: barley, dates, and sesame seeds. The choice farming lands were located in the higher regions out of reach of the floodwaters, or else in areas that drained on their own.

The Sumerians' agricultural developments testify to their ingenuity. They were the first people to harness animals (oxen) to their ploughs. They then developed a shoulder-yoke for the oxen that made steering the plough easier. Next, they changed the shape of the plough so that it became a machine for turning the soil, not just one for scratching a furrow. The Sumerians were also the first people to add a seed drill to the plough.

But their most significant invention was the system of dams and canals that they developed to control the floodwaters and to irrigate their fields. Each city-state built a main canal that was fed by a dam on either the Tigris or Euphrates river. Feeder canals, constructed on a slant so that the water could flow easily, linked the main canal to ditches surrounding the city's fields. All channels, large and small, were controlled by gates regulated by removing or inserting clods of earth. Simply maintaining such an intricate network of canals required a great deal of time and effort.

Even a well-constructed canal system could not guarantee the farmers success. Flooding remained a constant concern. At any time, rushing floodwaters could dump soil into the canals, clogging them and destroying the fields. Even one clogged canal could mean disaster. Therefore, the government hired irrigators to help keep the large canals clear, and made each farmer responsible for maintaining his own small canals and cleaning them out regularly.

The importance of the irrigation works is illustrated in the message on this clay tablet, dating from 2000 BCE:

*When you are about to cultivate your field, take care to open the irrigation works so that the water does not rise too high in it. When you have emptied it of water, watch the field's wet ground that it stays even; let no wandering ox trample it. Chase the prowlers and have it treated as settled land. Clear it with ten narrow axes weighing no more than two thirds of a pound each. Its stubble should be torn up by hand and tied in bundles; its narrow holes should be dragged and the field fenced. During the hot weather divide the field into parts. Let your tools hum with activity.*

The fertile, rain-watered valleys in the northern areas of Mesopotamia did not need as much irrigation to grow grain and fruit. Yet the Assyrians also developed a system of irrigation. Like the regions farther south, farming land in Assyria was limited to a narrow band along the river banks. The people protected this valuable land by preventing cows, donkeys, and sheep from grazing on it. Instead, most farm animals were raised in enclosed pens. But on the rich grasslands of the northern mountain slopes, flocks of sheep grazed freely, and wool became an important industry in the region.

Agriculture was closely linked to the political and social organizations in Mesopotamia. The Sumerians, for example, believed that the land surrounding a particular city-state belonged to the god of that city-state. Since priests were the voice of the gods, the land was owned by the temples and the priests leased it to farmers.

Sumerian farmers were expected to return one-third of the proceeds from their harvest to the god of the city-state and one-third to the king to help finance the operation of the government. The final third was theirs to keep, even though the government still taxed them on their profit! In the period between 2500 BCE and 2360 BCE, priests levied higher taxes than usual and confiscated the land of any farmer who did not pay. These actions enraged the farmers.

Urukagina, king of Lagash, realized how unfair the system was. He took over the taxing powers of the priests and returned much of the land in his city-state to the farmers. Later, during the time of Hammurabi and the Babylonian empire, individuals were allowed to own a great deal of the land around the cities.

**INDUSTRY**

Abundant agricultural production in Mesopotamia meant that not all citizens had to farm: some could become craftspeople or artisans. Workrooms were located around and within the low walls of the ziggurats. Here, in various clusters, you could see tanners preparing animal skins for containers, military dress, and harnesses; potters spinning clay vessels on wheels; carpenters making agricultural tools, wagons, and ships; and weavers producing woollen textiles. There were also metalworkers, whose smiths worked in copper,
gold, silver, and bronze, creating copper bowls, statues of gods and goddesses, tools for the fields, weapons, objects for the temples, and ornaments for the public.

Overseers supervised the various operations, monitoring the quality of each person's crafts. The temple scribes kept detailed records and accounts on clay tablets to guarantee that the industries were run efficiently.

TRADE
Small boats made of reeds and inflated goatskins, called keleks, carried goods up and down the Tigris and Euphrates rivers from one Sumerian city to another. But transport along the river was not always easy. Swift currents and sandbanks encountered on the trip downstream could cause the boats to capsize. Sometimes, the travellers had to dismantle the vessels and carry them back upstream.

Long ships, powered by square sails and oars, brought back building stone from Africa, copper from Cyprus, gold from Egypt, and cedar from Lebanon. In exchange, the Sumerians traded wool, cloth, jewellery, oil, and grains. Overland, caravans of donkeys set out in search of silver from the Taurus Mountains. Such ventures in trade netted an exchange in culture and ideas that further promoted the development of the civilized world.

The Babylonians were perhaps the greatest traders of all. The main trade routes of the ancient world met at the city of Babylon. While Babylonian ships traded down the river and along the coast of Arabia, one of the first uses of money in the ancient world. Although it was still based on grain, the Babylonian system was much more practical.

The Babylonians introduced a precious metal coin, most often of silver, called the shekel. The shekel weighed the same as 180 grains of barley, the most important grain product of the Mesopotamian economy. Another coin, the mina, was worth 60 shekels. Finally, a talent was worth 60 minas.

The most commonly used coin was the mina. With these coins in use, ships and caravans had a much lighter load since they no longer had to carry the heavy sacks of grain!
and India, Babylonian merchant caravans ventured far into Persia and Asia Minor. Like the Sumerians and the Babylonians, the Assyrians were enthusiastic traders. Ashur and Nineveh became trading centres very early in their history, long before either was considered a prominent city. Caravans came to these centres from Babylonia to exchange manufactured goods for Assyrian raw materials such as stone, metal, and wool. In time, the small trading bazaars of these two cities became major market centres where people could purchase linens from Egypt, pearls from the Red Sea, and iron weapons from Anatolia (part of Turkey in western Asia).

Trading became very important to the economy of major Assyrian cities. A population of craftspeople grew in each centre, taking up residence in their own quarter of the city according to their specialty. They opened stalls on the streets to exchange their bronze, pottery, or woollen goods for imported products. Like the Sumerians, the Assyrians recorded all of their business transactions, but they simplified the system somewhat by using fewer signs and symbols.

Praising the greatness of the Persian King, Darius I, in 450 BCE, Darius had ordered stone-cutters to climb the side of this mountain and carve out a testimony to his greatness in three languages. One was old Persian, a language Rawlinson could read. Another was cuneiform, the script of ancient Babylon.

Rawlinson wanted to copy the script from the monument so that he could compare the languages. Maybe the old Persian would help him to read the cuneiform, which linguists had been trying to decipher for centuries.

Viewing the script through binoculars didn’t give Rawlinson enough clarity. The only way he could get closer was to climb halfway up the face of the wall to a narrow ledge. A ladder was raised to the ledge from the roadway far below. Carefully, Rawlinson climbed to the top rung as the ladder pressed against the steep cliff. Standing at the top, he leaned over, hanging on to a rope, and pressed pieces of wet paper onto the grooves of the inscription. As they dried, he carefully peeled them away and lowered them to the ground. Rawlinson had his inscriptions.

Once Henry Rawlinson had copies of the script, he was able to begin the work of deciphering cuneiform by comparing it to the old Persian text. He spent 12 years deciphering the text before he could begin translating.

Cuneiform was one of the earliest forms of writing and was based on picture signs. It first appeared in Sumer about 3000 BCE, and probably developed from the need to keep accurate records in trade and agriculture.

Until Rawlinson and others learned how to read cuneiform, historians didn’t know that ancient Sumer had ever existed. They knew about the ancient Babylonians and Assyrians, from the Bible and other sources, and they knew that cuneiform

**Reflect and Analyze**

1. What agricultural innovations did the Mesopotamians introduce? Explain how these innovations were used.

2. On a map, sketch Sumerian and Babylonian trade routes and label the products they exchanged with distant lands.

3. What role did religion and religious beliefs play in the economy of the Mesopotamians?

4. Evaluate the positive and negative effects these innovations might have had on Mesopotamian society:
   - shoulder yoke
   - money
   - irrigation canals
   - iron.

5. Role play a conversation between a Mesopotamian craftsperson, such as a tanner or carpenter, and a common farmer. The craftsperson argues that the specialization of labour is a positive development, while the farmer argues that it is not.

**The Arts**

**Writing**

Iran, 1835

Henry Rawlinson stood staring up at the sheer face of the Behistun Rock, a 120-m cliff that contained ancient carvings...
Tablets were the records left by these peoples. But it wasn’t until they began to decipher the thousands of cuneiform texts found in Mesopotamia that they began to learn of an earlier civilization that predated all the others.

People wrote cuneiform on mud or clay tablets, inscribing the picture signs while the tablet was still wet. Rather than scratch the notations into the mud, scribes would jab the tablet with the end of a reed cut in the shape of a sharp triangle. The word cuneiform comes from the Latin word *cuneus*, meaning wedge. Once the wedge-shaped marks were made, the tablet was baked like a brick.

The earliest Sumerian cuneiform symbols were picture symbols or pictograms that represented concrete objects such as an ox or a shaft of grain. At first, they were written in columns and read downwards from right to left. As time passed, however, cuneiform evolved. Scribes rotated the symbols ninety degrees to make them easier to record and the symbols became more stylized. Eventually, the symbols came to represent not only objects, but abstract ideas as well. Symbols representing ideas are called ideograms. The Sumerians also abandoned the practice of writing from right to left because it tended to smudge the tablet. On tablets dating from later periods, the symbols were clearly recorded and read from left to right.

In the ancient world, the scribes were responsible for reading and writing. The early scribes were priests, but later they became a recognized professional group on their own, greatly respected by all classes of people. Rulers depended on them to record laws, and common people needed them to...
write letters and to read for them. Because of their education and social standing, scribes rose to positions of high government service in the ancient world. In Sumer, for example, they oversaw such government operations as the development and maintenance of the irrigation works.

Cuneiform spread from Sumer to the north, where it was adopted and developed by the Babylonians and Assyrians. Historians give part of the credit for the language’s migration to Sumerian traders, who used this form of writing to maintain records of their sales and purchases.

LITERATURE
In long narrative poems or epics, the people of Mesopotamia preserved ancient legends and passed on religious teachings, accounts of disasters, and stories of their heroes. The earliest example of this literary form, and one of the oldest pieces of literature in the world, is the Epic of Gilgamesh.

This epic is the story of a heroic Sumerian king, Gilgamesh, who ruled around 2600 BCE. The story was likely passed down orally for many generations, and not recorded until long after its creation. Some historians suggest that the epic’s tablet versions date from about 1700 BCE.

Gilgamesh, both admired and feared, was considered to be two-thirds god and one-third man. In the epic, Gilgamesh was often seen as brutal and quick to forget the feelings of others. For example, even though he protected his city with a solid defensive wall, he made the people work hard to construct it. Finally, the people asked the gods to send a heavenly being who could match the strength of Gilgamesh.

The gods sent a huge, hairy beast-like creature called Enkidu, who went to live in the hills near Uruk. Gilgamesh then sent a woman into the hills to tame Enkidu and bring him back to Uruk to live like a man. When Gilgamesh and Enkidu later came to battle, neither emerged a winner. Instead, they joined forces and set out on adventures together.

ART AND SCULPTURE
Sculpture was an important part of life in Mesopotamia. Almost everyone owned a small statue of one of the gods made of terra-cotta, gypsum, stone, or copper. Nearly all of the statues depict a figure standing quietly with hands clasped in prayer. Larger carvings were done for the temples.

Mosaics were often used to tell a story. One of the most famous mosaics is

THROUGH THEIR EYES
The Epic of Gilgamesh

In this extract from the Epic of Gilgamesh, Enkidu is describing to Gilgamesh a place he was forced to enter in a dream. What is this place? What does this extract tell us about how the Sumerians view the afterlife?

His was a vampire face, his foot was a lion’s foot, his hand was an eagle’s talon. He fell on me and his claws were in my hair, he held me fast and I smothered; then he transformed me so that my arms became wings covered with feathers. He turned his stare towards me, and he led me away to the palace of Irkalla, the Queen of Darkness, to the house from which none who enters ever returns, down the road from which there is no coming back.

There is the house whose people sit in darkness; dust is their food and clay their meat. They are clothed like birds with wings for covering, they see no light, they sit in darkness.

... In the house of dust which I entered were high priests and acolytes, priests of the incantation and of ecstasy; there were servers of the temple, and there was Etana, that king of Kish whom the eagle carried to heaven in the days of old. I saw also Samuqan, god of cattle, and there was Ereshkigal the Queen of the Underworld; and Belit-Sheri squatted in front of her, she who is recorder of the gods and keeps the book of death. She held a tablet from which she read. She raised her head, she saw me and spoke: “Who has brought this one here?”
the Standard of Ur found by Leonard Woolley during his excavations of the royal tombs at Ur in 1922. A standard is a symbol of the power or authority of the king. In modern times, we often use a flag as a standard of king or country. The Standard of Ur consists of two small rectangular wooden panels inlaid with mother-of-pearl, mussel shells, and lapis lazuli. Each panel is 56 cm long and 28 cm wide. One side of each panel depicts scenes of war. The other side depicts scenes from a banquet or victory feast.

The mosaics of battle show soldiers bringing prisoners of war back to their king, some of the people riding in four-wheeled chariots. The depiction of these vehicles is the earliest evidence we have of the use of the wheel.

Relief carvings on buildings were an important art form in Babylonia and Assyria. In some cases, they depicted mythical animals or figures; in other cases, they portrayed an important king.

**The Sciences**

**The Wheel**

Mesopotamia's most important technological advance was the wheel, invented by the Sumerians. How did this discovery come about? We can only speculate. Perhaps an inventive citizen was watching a farmer struggling hopelessly with a heavy load, and suddenly got the idea that simply...
rolling a tree trunk beneath the burden would move it along more easily.

The wheel had a monumental impact from the first days of its discovery. By 3250 BCE, the Sumerians built wheeled wagons and chariots to replace the sleds that they had used previously. With an ox pulling a wagon, farmers transported three to four times the weight in crops and produce that they had been able to carry on sleds, on donkeys, or on their own backs.

The invention of the wheel had applications beyond the field of transportation. Pulleys, for example, made it easier to raise water from wells, facilitating the irrigation process. The potter’s wheel marked the beginning of fine pottery, as it made shaping symmetrical vessels much easier.

METALLURGY
Historians have credited the Sumerians with the technological advance that gave rise to the Bronze Age, which began about 3000 BCE. Some recent discoveries in Thailand, however, suggest that the Bronze Age may have begun in eastern Asia.

Before the Bronze Age, dating from as early as 8000 BCE, copper had been the main metal used in western Asia. A soft metal, copper is fine for creating jewellery but poor for making weapons or tools. Most tools in this period were made of stone. For a long time, copper was processed by being hammered into shape. Then someone discovered how to smelt and cast copper by pouring it into moulds.

Bronze is an alloy composed of copper and tin. It is superior to copper because it is harder, more durable, and provides a sharper cutting edge. The Sumerians probably created bronze by accidentally smelting copper and tin together. The Sumerians traded with Egypt for supplies of copper, and with Anatolia and Armenia for tin. Bronze was an expensive metal to produce, but easier to cast than copper because it has a lower melting point. Bronze took over from stone as the chief material for tool-making, and was widely used in western Asia and Europe for about 2000 years. Then it was replaced by iron, which makes better tools and is more common, but is more difficult to process.

The Iron Age began in about 1200 BCE. The Hittites introduced iron into the Middle East, and the Assyrians were the first people in Mesopotamia to work with the new metal. The Hittites of Anatolia (Turkey) were descendants of waves of Indo-Europeans who had arrived in the Middle East approximately 2500 BCE. The Hittites learned how to extract the iron from the ore found in the mountains of their homeland. They found that the smelting process required a hotter fire than for bronze, and that the ore needed to be mixed with limestone. When the ore was poured into moulds, it hardened as cast iron, but was relatively weak. But if the cast iron was reheated, beaten or “wrought,” and then cooled, it became stronger. This metal was called wrought iron. Trade and military conquests spread an awareness of iron and its value to the Assyrians in Mesopotamia.

MATHEMATICS
The Sumerians could count in tens and hundreds, but they preferred to use 60 as their arithmetical unit. Some mathematicians, who have tried to guess why the Sumerians preferred this system, note that 60 can be divided by all numbers up to six. Perhaps this base made their mathematical calculations easier.

Whatever the reason for the number 60, mathematics was extremely important to the Sumerians’ political and economic systems. They used mathematics to help build canals, to keep accurate farm and trade records, and to tabulate taxes owed to the state. This mathematical system left us a legacy as well. From the Sumerians, we have received the 360-degree circle, the 60-minute hour, and the 60-second minute.

TIME
The ancient Mesopotamians believed that the stars controlled the forces of heaven. They named various groups of stars, gave them special meanings, and used these groups and their movements to predict the future. The signs of the zodiac that astrologers use today developed from this practice.

Astronomers studying the stars worked out a lunar calendar of 12 months. They divided their year into two seasons, emesh (summer) and enen (winter). Since the time lapse from one new moon to another is only 29 1/4 days, the lunar year of 12 months contained only 354 days—11 1/4 days short of the solar year. After three years, therefore, the calendar was 33 1/4 days out. As a result, an extra month was put into the calendar to bring it in line with the solar year. It was always the king’s responsibility to decide when to add the extra month every three years, but he usually relied upon the advice of his astronomers.

Of all the Mesopotamian peoples, the Chaldeans took the greatest interest in the movements of the heavenly bodies. They believed that they needed detailed observation and measurement to develop a more accurate calendar so that they could plan agricultural operations more effectively.
The Chaldeans were convinced that events on earth were a reflection of, or related to, events in the sky. In particular, they relied on the stars for determining direction, whether on land or sea.

REFLECT AND ANALYZE
1. What contributions did the Mesopotamians make in the fields of mathematics and astronomy?
2. How were bronze and iron acquired by the Mesopotamians?
3. “The wheel was the greatest mechanical invention of all time.” Defend or dispute this statement.
4. Some of the greatest innovations in human history have been achieved by accident. Research two such innovations and consider how our lives would be different without them.

LOOKING BACK
The people of Mesopotamia developed a magnificent and thriving civilization despite environmental obstacles. They learned to control the forces of nature and turn adversity to advantage. Throughout their history, they established and nurtured most of the basic components that historians consider essential to the development of a true civilization.

Consider the legacy. The first known form of writing was developed in Sumer and was used to record business transactions, farm yields, laws, myths, and legends. It was also used by the Assyrians to chronicle the history of their kings. Sumerian cuneiform writing evolved and remained the standard form for thousands of years. Laws and law codes, developed by Ur-Nammu and Hammurabi, were recorded to regulate human behaviour and served as models for later codes. The rulers of Mesopotamia, although not democratic, demonstrated the need for stable government, a principle that other civilizations would adopt as well. Finally, the innovations that Mesopotamians made in the fields of architecture and art, their invention of the wheel, and their extended use of iron would greatly affect the course of human history.