Scientists have been looking for the causes of cancer for a long time. Many scientists think that the disease is caused by genetics (something that is inherited) or by the environment. An ancient mummy at the National Archaeology Museum of Lisbon in Spain has pointed scientists in the direction of genetics.

Scientists studied the bones of the Lisbon mummy with special X-ray equipment. The mummy is an unknown man who lived in Egypt between 200 and 300 B.C. He died in his 50s. Lesions (injuries to the tissue or bone) on his pelvis and spine show that he died of cancer. Some scientists think cancer may be caused from pollution or over-processed food. Other scientists are looking into how chemicals might cause cancer. In ancient Egypt there were not pollutants, processed food or chemicals in the environment like we have today. Finding cancer during this time may help scientists figure out how it is caused.

Discovering how ancient people developed cancer helps scientists get a step closer to finding a cure. This new discovery points to genetics as one possible cause. Cancer has been with us for a long time. The good news is that each new discovery takes us closer to a cure. It could even be cured in your lifetime!
Like the people of Mesopotamia, the ancient Egyptians practiced polytheism. This means they worshiped many gods—more than 700 gods and goddesses, in fact. The most important god to the Egyptians was probably the sun god, Ra. The sun is what made life possible. Other gods included Anubis, god of the dead, who had the body of a man and the head of a jackal; Thoth, god of wisdom; Osiris, another god of the dead; and Horus, god of the sky.

The Egyptians believed in an afterlife and that a person’s behavior in this life would determine how he or she would spend eternity. The Egyptians also believed that the dead went to the Hall of Judgment where the deeds of their lives would be judged. This was where Amnis would place your heart on a scale that was balanced with a divine feather. The scale weighed your good and bad deeds on Earth. If you had more good in your life, your spirit would have an eternity of happiness. Too many bad deeds meant Ammut, the devourer of the dead, would destroy your spirit.

Egyptians believed they could take their possessions with them into the afterlife. Food, chariots, extra wigs—even clean underwear—were all packed for the next life. The wealthy wanted help for all their chores in the afterlife. Sometimes, they even packed slaves. (Not that the slaves wanted to go along, since it meant they would be killed.) Egyptians also believed that in order to live forever, your spirit, or Ka, needed a home. It needed your body, or preserving the dead body, became so important.

Mummies
Because the Egyptians believed Ka needed a body to call home, they developed the mummification process. They began mummification around 2600 B.C. and used the process for 3,000 years. The procedure took about 70 days and involved drying out the entire body. The embalmer who performed this task kept his identity secret by wearing a mask of a jackal, so he looked like Anubis. He removed all organs from the body to prevent decaying. He removed the brain through the nose using a long metal hook. He threw it away because the Egyptians didn’t think the brain was very important. He placed other organs like the stomach, liver and lungs in special containers called canopic jars for safekeeping. He carefully wrapped the heart, the center of caring, and replaced it in the body cavity. Then he wrapped the body in linen, sometimes 20 layers individually wrapped.

Jean-Francois Champollion
Born in 1790, Jean-Francois Champollion helped change what the world knows about ancient Egypt. Soon after Champollion was born, a magician said that one day Champollion would become famous. He was correct. Champollion is credited with discovering the meaning of the ancient Egyptian writing called hieroglyphs. He helped us understand the world of the ancient Egyptians.

As a young boy, Champollion was often sick so he couldn’t go out and play sports, and there weren’t computers and video games at the time. Champollion spent his days in the world of books. The French boy learned to read Hebrew, Arabic, Chinese, Syriac and Chaldean—all by the time he was a teenager. He also could read Latin and Greek.

Champollion was just a young boy when the Rosetta Stone was found. He announced then that he would be the first person to translate the hieroglyphic writing. Champollion spent years trying to figure out the meaning of the Egyptian hieroglyphs. Studying the three different writings of the stone—of which only Greek could be read—Champollion determined they were the same message. He used the Greek as a key to deciphering the hieroglyphic writings. Champollion was working on an Egyptian dictionary and grammar book when he died in 1832.
food for the afterlife).

Where did all the mummies go? Grave robbers unwrapped many of the mummies in hopes of finding jewelry. The bodies were left behind to decay. Some mummies were ground up and mixed into paints. Artists thought it would help make paints last longer. People also believed that the black ointment on the skin of mummies had medical uses. Some doctors ground up thousand-year-old mummies and gave the powder as a cure for stomachaches and headaches. Because people in the 1800s were fascinated with Egypt, some visitors brought back mummies and unrolled them in front of guests! When mummies are discovered today, they are treated with care and respect.

Hieroglyphs

Hieroglyphs, which means “sacred-writing” in Greek, was the picture writing of the ancient Egyptians. It was thought to be sacred because very few could understand it. The writing system included hundreds of pictures, and people who could read and write hieroglyphs were called scribes.

To read hieroglyphs, you need to follow the direction of the pictures. For example, if a vulture faces to the right, you read the hieroglyphs from right to left. Hieroglyphs could be written left to right, top to bottom or right to left. There were no spaces or punctuation. Later, the pictures that represented whole words were changed to represent only a syllable.

Papyrus

The ancient Egyptians found a reed growing along the Nile River that could provide many necessities. The aquatic plant, papyrus, could grow to be 15 feet tall. They wove it into mats, rope, baskets and sandals. The root of the papyrus was a source of medicine, food and perfume. It was also perfect as a writing material. It is from the word “papyrus” that we get the word “paper.”

Strips of papyrus were laid side by side vertically. Another layer of cut papyrus was laid across the first layer horizontally. Pressing the pieces firmly together created a yellowish paper. They pasted several sheets of paper together to make scrolls and stored them in pottery jars for safekeeping. They used a reed that spread out at the end (like a small paintbrush) as a writing tool. The ink was a mixture of water, black soot and vegetable gum.

When the Chinese method of making paper came to the area, it replaced papyrus because it was easier and less expensive. For many years, papyrus could not be found in Egypt except in museums. The land where papyrus grew had been tilled into farmland. Realizing the importance of the plant to Egypt’s history, one Egyptian began growing papyrus on a plantation in 1969.

Today, there are several papyrus plantations in Egypt, and this important part of history is being preserved.

Did you know?

- The first mummified lion was unearthed in 2004 from a tomb at Saqqara. It dates back about 3,900 years.
- An ancient Egyptian remedy for poor eyesight was to pour honey, ground up pig’s eye and red earth into your ear and recite a spell at the same time.
- The oldest mummy isn’t from Egypt but from Chile. It dates back about 7,800 years.
- Ancient Egyptian women wore wax cones sprinkled with perfume on their heads.
- The Egyptian game of Senet is one of the world’s oldest board games.
- The Egyptians used a 365-day calendar similar to the one we use today.

A Key Made of Stone

When Napoleon Bonaparte’s soldiers were working along the Nile Delta, one of the men tripped on something in the mud. The object was a stone, which turned out to be a key to translating the ancient Egyptian hieroglyphs. Imagine what would have happened if he had not found the stone or if he ignored it and kept walking. Perhaps we would still be unable to read hieroglyphs.

The black stone was named the Rosetta Stone because it was found in 1799 along a branch of the Nile River called Rosetta. The stone contains three inscriptions and dates back to 196 B.C. Two inscriptions are in a form of hieroglyphs and the other is Greek. All three inscriptions say the same thing in different written languages. People could read the Greek writing, so this became the key to deciphering hieroglyphs.

The Rosetta Stone is extremely heavy, weighing nearly 1,676 pounds. It is about 45 inches at its highest point, 11 inches thick and 28.5 inches wide. You can see the Rosetta Stone in London’s British Museum. At one time, you could actually touch the stone, but now it is kept safely in a case.
We have learned about the ancient Egyptians because they have left much of their culture behind. What are some things you would leave behind for another culture to unearth in the future? For example, is skiing an important activity to you? Do you like the Harry Potter

As you read this week’s lesson, circle or highlight all proper nouns with any color pen or highlighter. This will help you find some of the crossword answers and get ready for this week’s test.

Use the map of Egypt to answer the following questions.

1. The Aswan High Dam is located on this lake.

2. Which Egyptian city shown on the map is closest to Saudi Arabia?

3. Which country is south of Egypt?

4. What is the capital of Egypt today?

5. What three countries are east of Egypt?

6. Which country is west of Egypt?

7. Near which body of water is Alexandria located?

Across
2. god with the head of a jackal
4. picture writing of the ancient Egyptians
5. This stone turned out to be the key to understanding hieroglyphs.
6. belief in many gods
8. the river many believe is the longest in the world
9. jars in which a dead person’s organs were stored
10. king who combined Upper and Lower Egypt into one kingdom

Down
1. reed used to make paper
3. Frenchman who decoded the Egyptian writing system
7. the organ thrown away during mummification

We have learned about the ancient Egyptians because they have left much of their culture behind. What are some things you would leave behind for another culture to unearth in the future? For example, is skiing an important activity to you? Do you like the Harry Potter books? Write a paragraph listing five items you’d leave behind in a tomb and tell why they are valuable to you. Remember to check for proper spelling, grammar and punctuation.