Sonnet 73

by William Shakespeare

That time of year thou mayst in me behold
When yellow leaves, or none, or few, do hang
Upon those boughs which shake against the cold,
Bare ruin'd choirs, where late the sweet birds sang.
In me thou see'st the twilight of such day
As after sunset fadeth in the west;
Which by and by black night doth take away,
Death's second self, that seals up all in rest.
In me thou see'st the glowing of such fire,
That on the ashes of his youth doth lie,
As the death-bed, whereon it must expire,
Consum'd with that which it was nourish'd by.
This thou perceiv'st, which makes thy love more strong,
To love that well, which thou must leave ere long.

Name: _____ Date: _____

1. What time of year can be seen in the speaker of this poem, based on lines 1-4?

A. the time when trees are blooming with flowers

B. the time when the sun shines and birds sing sweetly

C. the time when snow coats tree branches and the sky is gray

D. the time when few or no leaves hang on boughs

2. Which of these rhyming lines appear right next to each other in the poem?

A. "As after sunset fadeth in the west;" and "Death's second self, that seals up all in rest."

B. "That on the ashes of his youth doth lie," and "Consum'd with that which it was nourish'd by."

C. "That time of year thou mayst in me behold" and "Upon those boughs which shake against the cold"

D. "This thou perceiv'st, which makes thy love more strong," and "To love that well, which thou must leave ere long."

3. Read these lines from the poem:

This thou perceiv'st, which makes thy love more strong,

To love that well, which thou must leave ere long.

Based on these lines, what can be concluded about the addressee of this poem, "thou"?

A. the addressee wants to leave the speaker of the poem

B. the addressee loves the speaker of the poem

C. the addressee does not care about the speaker of the poem

D. the addressee is older than the speaker of the poem

4. Based on the poem, how could the speaker be described?

A. teenaged, nearing adulthood

B. very young and childish

C. grown up and in the middle of life

D. old and nearing the end of life

5. Which line best expresses the main message of the poem?

A. "When yellow leaves, or none, or few, do hang"

B. "Death's second self, that seals up all in rest."

C. "In me thou see'st the glowing of such fire"

D. "To love that well, which thou must leave ere long."

6. Why might the poet have begun lines 5 and 10 with the same phrase, "In me thou see'st," but ended the two lines differently?

A. to demonstrate that the speaker is very self-centered

B. to describe a single characteristic of the speaker in different ways

C. to hint that the speaker himself is not able to see anything

D. to show that the addressee ("thou") is very observant

7. Read these sentences from the poem:

In me thou see'st the twilight of such day

As after sunset fadeth in the west;

Which by and by black night doth take away,

Death's second self, that seals up all in rest.

What does the phrase "Death's second self" refer to?

A. black night

B. the west

C. sunset

D. the twilight

8. What three things does the speaker say can be seen in him or her?

9. Read the last two lines of the poem. In your own words, what do these two lines mean?

10. Currently, there are no "line breaks" between different parts of the poem. If you were to insert breaks into the poem to separate it into four parts, where would you place those breaks? Be sure to consider rhyme scheme, the completion of sentences in the poem, and the ideas expressed at different points in the poem. Use evidence from the text to explain your reasons for dividing the poem in the manner you choose.

Loveliest of Trees

by A.E. Houseman

Loveliest of trees, the cherry now
Is hung with bloom along the bough,
And stands about the woodland ride
Wearing white for Eastertide.

Now, of my threescore years and ten,
Twenty will not come again,
And take from seventy springs a score,
It only leaves me fifty more.

And since to look at things in bloom
Fifty springs are little room,
About the woodlands I will go
To see the cherry hung with snow.

Name: _____ **Date:** _____

1. What does the speaker call the "loveliest of trees"?

A. the white tree

B. the maple tree

C. the cherry tree

D. the oak tree

2. What does the poet describe in the first verse of the poem?

A. the wood's decorations for Easter

B. a tree in the woods hung with bloom

C. a bright red tree in the woods

D. the path he or she takes through the woods

3. Read these lines from the poem:

Loveliest of trees, the cherry now

Is hung with bloom along the bough,

And stands about the woodland ride

Wearing white for Eastertide.

Based on this evidence, which season does this verse reflect?

A. summer

B. winter

C. fall

D. spring

4. The speaker of the poem is twenty years old and expects to live till he or she is seventy.

What lines from the poem best support this conclusion?

A. And stands about the woodland ride / Wearing white for Eastertide.

B. And since to look at things in bloom / Fifty springs are little room,

C. Now, of my threescore years and ten, / Twenty will not come again,

D. Fifty springs are little room, / About the woodlands I will go

5. What is a main theme of this poem?

A. Nature is most lovely in the springtime, when everything is in bloom.

B. Life is relatively short, so you should enjoy the world's beauty while you are able.

C. It is important to view cherry trees as often as possible because of their short lifespans.

D. There is plenty of time in life to do both the things you must do and the things you want to do.

6. Read the final verse from the poem:

And since to look at things in bloom

Fifty springs are little room,

About the woodlands I will go

To see the cherry hung with snow.

What does the poet mean by the phrase "little room" in this verse?

A. a small space

B. too much time

C. a short season

D. not much time

7. Read these lines from the poem:

Now, of my threescore years and ten,

Twenty will not come again,

And take from seventy springs a score,

It only leaves me fifty more.

What does the phrase "fifty more" in the last line of this verse refer to?

A. winters

B. scores

C. trees

D. springs

8. During which part of the year does the speaker view the cherry tree?

9. Why does the speaker decide to go to the woodlands and see the cherry tree "hung with snow?" Use evidence from the text to support your answer.

10. Based on the poem, how might the speaker be described? Be sure to address the kinds of things the speaker appreciates, enjoys, or values. Use evidence from the text to support your answer.

Ancient Infant's DNA Provides Key to Native American Ancestry

This article is provided courtesy of History.com

Between 13,000 and 12,600 years ago, members of the Clovis culture appeared in North America, where they made and used distinctive stone-tipped spears to hunt mammoth, bison and mastodon. Until recently, all that archeologists knew about the Clovis people came from studying their tools, which have been unearthed at wide-ranging sites across the country. Now, DNA analysis of a single human skeleton--that of a one-year-old boy buried in a rocky field in modern-day Montana--has allowed scientists to link the Clovis culture to Native Americans throughout the Western Hemisphere.

Construction crews first discovered the ancient remains of an infant in 1968 on private property owned by the Anzick family in western Montana. Dubbed Anzick-1, the one-year-old boy is the only human skeleton that has been identified as a member of the widespread, sophisticated Ice-Age culture known as Clovis. Now, a team of scientists has succeeded in mapping the infant's DNA, in the oldest genome sequence of an American individual ever performed. According to their findings, published in the journal Nature in February 2014, the Clovis people are direct ancestors of many Native Americans now living in North America, and can be linked to many native peoples in Central and South America as well.

Up to this point, all scientists studying the Clovis culture had to go on were the stone and bone tools

that have been found at sites ranging from Washington State to Florida, along with many states in between. By sequencing the genome of the infant recovered at the Anzick site, the international team of researchers gained the most vivid insight yet about who these people might actually have been. They compared the DNA of the Clovis infant to several different genomes, including a 24,000-year-old sample from a young man buried on the banks of Lake Baikal in Siberia, a 7,000-year-old sample from Spain and a 4,000-year-old sample from Greenland. The Clovis DNA showed the most similarity with that of the Siberian youth, whom scientists genetically linked with today's Native Americans in 2013.

The new study adds to existing archeological evidence that Native Americans descended from humans who migrated to North America from Asia through Siberia around 15,000 years ago. They are believed to have made the voyage across the Bering land bridge, which connected Asia with North America during the last Ice Age. According to archeologist Michael Waters of Texas A&M University, a member of the team who conducted the new study, the genetic evidence "strongly suggests that there was a single migration of people into the Americas....[T]hese people were probably the people who eventually gave rise to Clovis."

Such evidence casts doubt on other theories arguing that Clovis' ancestors came from Europe, rather than Asia. Such hypotheses rely partially on the fact that the "Clovis points" found on their tools and weapons are so similar to the flint tools used by the Solutrean culture, which flourished in Spain and France during the Ice Age.

While Anzick-1 showed the most genetic similarities with Native Americans in North America, the study also revealed ties with the indigenous peoples of Central and South America. The team's data indicates that sometime between 13,000 and 24,000 years ago, the same ancient people that arrived from Asia split into two lineages: One gave rise to Clovis and today's Native Americans of North America, and the other became the ancestors of Central and South American tribes.

The scientists studying Anzick-1 have worked closely with Native American tribes in Montana, sharing the results of the study with them and ensuring that the remains were treated appropriately. The infant will be reburied later this year, on the same property from which he was unearthed. For their part, the tribes have shown little surprise at the scientists' conclusions. Shane Doyle, a professor of Native American History at Montana State University and co-author on the study, is also a member of the Crow tribe. As he told NBC News, after conversations with more than 100 tribe members, the main reaction was "We have no reason to doubt that we've been here for this long."

Name: _____ **Date:** _____

1. What was Clovis?

A. a widespread, sophisticated Ice-Age culture in North America

B. a culture that existed in Greenland about 4,000 years ago

C. a culture that flourished in Spain and France during the Ice Age

D. a culture that gave rise to Central and South American tribes

2. The text describes a possible sequence of human descent. At the end of the sequence are Native Americans. What people are at the beginning of the sequence?

A. people who migrated from Asia to North America about 15,000 years ago

B. tribes living in Central and South America today

C. people who were living in Greenland about 4,000 years ago

D. people who were living in Spain about 7,000 years ago

3. The Clovis people descended from humans who migrated to North America from Asia through Siberia around 15,000 years ago.

What evidence supports this theory?

A. the similarity between the DNA of a Clovis infant and the DNA of a member of the Crow tribe

B. the similarity between the DNA of a Clovis infant and the DNA of a person from Iceland who lived 4,000 years ago

C. the similarity between the DNA of a Clovis infant and the DNA of a person from Spain who lived 7,000 years ago

D. the similarity between the DNA of a Clovis infant and the DNA of a Siberian youth who lived 24,000 years ago

4. The Clovis people descended from humans living in Europe.

What evidence supports this theory?

A. the similarity between the tools of the Clovis people and the tools of people in Siberia

B. the similarity between the tools of the Clovis people and the tools of people in Montana

C. the similarity between the tools of the Clovis people and the tools of people in France and Spain

D. the similarity between the tools of the Clovis people and the tools of people in Greenland

5. What is the main idea of this text?

A. Construction crews discovered the ancient remains of an infant in 1968 in western Montana.

B. Similarities exist between the tools of the Clovis people and the tools used by members of the Solutrean culture.

C. DNA analysis of an ancient infant's remains has allowed scientists to link the Clovis culture to Native Americans.

D. Scientists studying the remains of an ancient infant worked closely with Native American tribes in Montana to ensure that the remains were treated appropriately.

6. Read this sentence from the text.

"According to their findings, published this week in the journal Nature, the Clovis people are direct ancestors of many Native Americans now living in North America, and can be linked to many native peoples in Central and South America as well."

What does the author mean by writing that the Clovis can be linked to many native peoples in Central and South America?

A. The author means that many native peoples in Central and South America could communicate with the Clovis people.

B. The author means that many native peoples in Central and South America are related to the Clovis people.

C. The author means that the Clovis people used the same technology as many native peoples in Central and South America.

D. The author means that the Clovis people got along well with many native peoples in Central and South America.

7. Read these sentences from the text.

"While Anzick-1 showed the most genetic similarities with Native Americans in North America, the study also revealed ties with the indigenous peoples of Central and South America. The team's data indicates that sometime between 13,000 and 24,000 years ago, the same ancient people that arrived from Asia split into two lineages: One gave rise to Clovis and today's Native Americans of North America, and the other became the ancestors of Central and South American tribes."

What word could best replace "While" in the first sentence?

A. Currently

B. Although

C. Consequently

D. Finally

8. Who is Anzick-1? Be sure to mention the Clovis people in your answer.

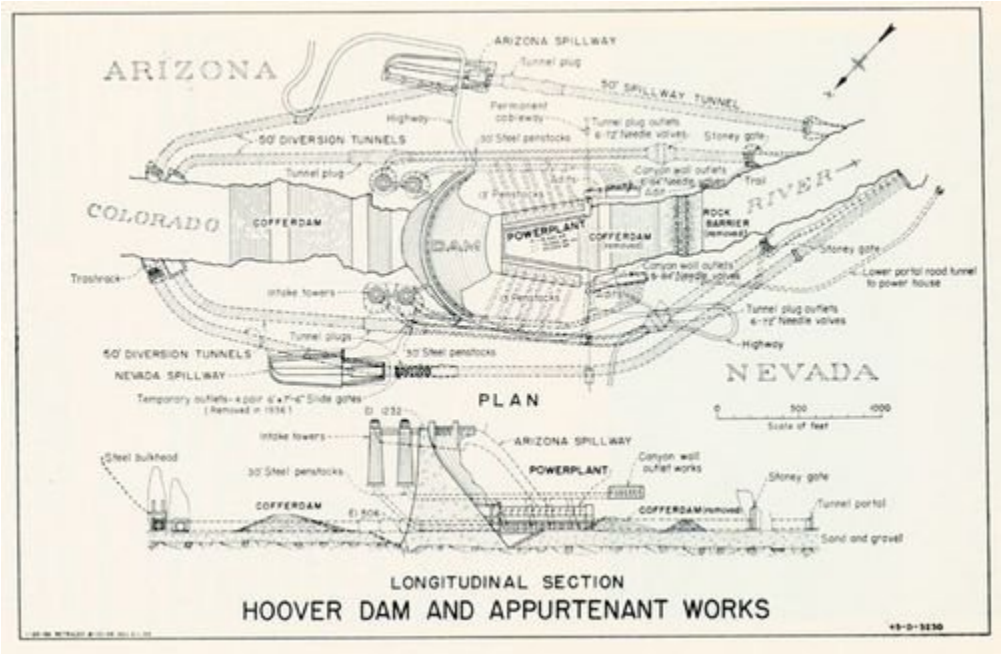
9. Scientists discovered a link between the DNA of Anzick-1 and the DNA of a Siberian youth. Who else has been genetically linked with the Siberian youth?

10. How likely is it that the ancestors of today's Native Americans came from Asia?

Support your answer with evidence from the text.

Everyday Energy

by Edward I. Maxwell



The pitcher gets into her set. Her glove and pitching hand come together by her chin, and she then lowers them to her belt. She looks at the catcher and nods. She brings her front leg up and pauses, standing perfectly balanced on her back leg. Then, in an instant, she steps forward with her front leg. Her whole body lurches toward home plate and her pitching arm swings out after it like a whip. At the furthest point, when a whip would crack, she lets the ball fly toward the catcher's mitt. The batter steps forward with her front leg and rotates her torso, swinging the bat with her eyes fixed on the incoming fastball.

"STRIKE THREE! BATTER'S OUT!"

Moments like these happen all across the physical world, whether on the molecular or cosmic level. Potential energy is the energy, chemical or physical, stored within an object, atom or molecule. Think about a car at the top of a roller-coaster, pausing just before it plunges into the next turn. A log resting in a fireplace just before it is about to be lit, is a treasure trove of potential energy. As the log burns, the connections between carbon atoms that make up the wood are being broken down, and the potential energy stored within those connections is being released as heat and light. As a comet approaches a planet or star, it slows, momentarily affected by the larger body's gravity. The potential energy builds and then reaches a breaking point, as the comet accelerates around the larger body and is slingshotted out the other side.

Sports showcase countless examples every day of potential energy being converted into kinetic energy. Kinetic energy is the energy of movement. When an archer draws and holds her arrow, her bow is brimming with stored potential energy. When she releases the bowstring, all the potential energy is quickly converted into kinetic energy, which is transferred to the arrow that takes flight. The

transfer of kinetic energy from the bow to the arrow is not a perfectly efficient process. What this means is that some of the energy does not make it to the arrow. Instead, the energy might be absorbed by the archer's arm, causing it to jerk to the side when the bow twangs. The most important thing to remember is that although the transfer of energy between objects may be inefficient, the energy still exists. It has simply been transferred along a different pathway. Therefore, the total sum of energy is still conserved.

The conversion of stored potential energy into kinetic energy can also be harnessed to power homes, factories and entire cities. The most notable example is the Hoover Dam. The Hoover Dam is an arch-gravity dam by design. This design name is the first clue as to how exactly the dam harnesses energy. Located in the Black Canyon of the Colorado River, the Hoover Dam formed, and now holds back, Lake Mead-the largest reservoir in the United States. The dam was built toward the beginning of the Great Depression. Constructed between 1931 and 1936, the dam had been the subject of planning and design sessions since 1900. Deliberations included discussions of potential catastrophes, should the dam fail or the lake grow beyond expectations.

Gravity acts as a force upon Lake Mead. Held at bay by the Hoover Dam, the waters of Lake Mead and the Colorado River gain greater potential energy with each passing moment. The Arizona and Nevada spillways are two means by which the waters of Lake Mead can escape the dam. As the lake water tumbles over the walls into a spillway, potential energy is instantly converted into kinetic energy. The channels through which the water normally escapes every day are the four intake towers. These towers funnel the water through sluices, or passageways, to the powerhouse and hydroelectric generators. When the water reaches the intake towers and is allowed to flow down through the sluices, all the stored potential energy created by the force of gravity acting upon the water is converted into kinetic energy, just as when water flows over the wall into a spillway.

By harnessing the converted potential energy of Lake Mead, the Hoover Dam provides power to California, Nevada and Arizona. Well over a dozen turbines are housed within the power plant at the base of the dam. Electricity production varies annually depending on how much water is required downriver from the dam and the water levels of Lake Mead. The greatest amount of energy was produced during 1984; a year after floods brought the lake to its highest levels. As of 2009 the American Southwest has entered a prolonged period of seasonal droughts. As a result, compared to its peak periods of energy production, the Hoover Dam has been recently generating much less energy.

Name: _____ **Date:** _____

1. A rollercoaster car at the top of the hill, an archer preparing to release an arrow, and a lake that sits above a dam are all examples of what kind of energy?

A. potential energy

B. kinetic energy

C. gravitational energy

D. consumption of energy

2. What does the author describe in the passage?

A. the history of human energy use in the United States

B. the ways in which potential energy is converted to kinetic energy

C. the best reasons to build new dams in the American Southwest

D. the consequences of drought for people who rely on dams

3. The conversion of stored potential energy into kinetic energy can also be harnessed to power homes, factories and entire cities. Which example from the text supports this conclusion?

A. the softball pitcher

B. the slingshotting comet

C. the archer

D. the Hoover Dam

4. Which of the following conclusions is supported by the text?

A. Nuclear power is the most efficient kind of energy for powering cities.

B. Professional athletes should study the science of energy to play better.

C. Dams power cities by converting stored potential energy into kinetic energy.

D. Drought is a serious problem for farmers in the American Southwest.

5. What is this passage mainly about?

A. The movement of comets through our solar system.

B. The scientific forces behind our favorite roller-coasters.

C. The unusual properties of water molecules in rivers.

D. The conversion of potential energy into kinetic energy.

6. Read the following sentences: "The Arizona and Nevada spillways are two means by which the waters of Lake Mead can escape the dam. As the lake water tumbles over the walls into a **spillway**, potential energy is instantly converted into kinetic energy."

As used in the passage, what does the word "**spillway**" mean?

A. A place where water flows over the top of a dam, creating energy.

B. A place where water accidentally spills, causing problems for engineers.

C. A place where water flows underground, into tunnels.

D. A place where water flows into nearby farms, watering crops.

7. Choose the answer that best completes the sentence below.

"The conversion of stored potential energy into kinetic energy can be harnessed to power homes, factories and entire cities. _____, the Hoover Dam provides power to California, Nevada and Arizona.

A. Even though

B. Initially

C. For instance

D. However

8. How does the Hoover Dam provide power to California, Nevada and Arizona?

9. What two factors determine the energy production of the Hoover Dam?

10. Explain why the prolonged period of drought (a time where there is little rain, and little water flowing into rivers and lakes) would cause the Hoover Dam to generate much less energy since 2009. Use evidence from the text to support your answer.

Tomb Figures: Bactrian Camel and Central Asian Groom

This text and images are provided courtesy of the Philadelphia Museum of Art.

BACTRIAN CAMEL 618-907 (Tang Dynasty, 618-907) Earthenware with sancai (tricolor) glaze Height: 32 inches (81.3 cm)

CENTRAL ASIAN GROOM 618-907 (Tang Dynasty, 618-907) Earthenware with sancai (tricolor) glaze and traces of painted decoration on head Height: 17 inches (43.2 cm)

These ceramic figures of a Bactrian camel and groom were made over one thousand years ago in China for the tombs of wealthy aristocrats or merchants. Objects such as these, along with figures of guardians, soldiers, and entertainers, were placed in tombs so that the spirit of the deceased person might have a rich and full afterlife similar to the life he or she had lived on earth. China was the eastern end of the Silk Route (also called the Silk Road), some five thousand miles of roads linking Asia, the Middle East, and Europe, along which traders exchanged not only goods and services but also customs and languages. Two-humped Bactrian camels were ideal for carrying the trade goods. Standing seven feet tall at the hump, they can carry great weight, walk on varied terrain with their large feet, and store fat in their humps, converting it to energy or water on long journeys. The unknown artists who made these sculptures filled them with a lively spirit. The camel twists its neck and opens its mouth to bray loudly. The groom raises his arm as if to control a stubborn camel with

invisible reins. Attached to the camel's saddle you can see a water flask, a slab of smoked meat, and a saddlebag with a fanged guardian face. The figures were coated with cream, amber, and green glazes, which still shine brightly after a thousand years. The groom's face and legs were not glazed, but instead were originally painted with watercolors, which have faded away over time.

Camel: Philadelphia Museum of Art: Gift of Mrs. John Wintersteen, 1964-9-1

Groom: Philadelphia Museum of Art: Gift of Charles H. Ludington from the George Crofts Collection, 1923-21-12

Name: _____ **Date:** _____

1. Where were these ceramic figures of a Bactrian camel and groom once placed?

A. in the palaces of Chinese emperors

B. in the huts of poor villagers

C. in the tombs of wealthy aristocrats or merchants

D. in the homes of wealthy aristocrats or merchants

2. What does the first paragraph of this text describe?

A. the purpose or use of ceramic figures like the Bactrian camel and groom

B. the importance of Bactrian camels and grooms in trade

C. the method that was used to create the figures of the camel and groom

D. the details that the artists included in the figures of the camel and groom

3. Read this sentence from the text.

"The unknown artists who made these sculptures filled them with a lively spirit."

What evidence from the sculptures supports this statement from the text?

A. The camel and groom were coated with cream, amber, and green glaze.

B. The camel twists its neck and opens its mouth, as if to bray loudly.

C. The camel is standing on a mostly flat ceramic surface.

D. The watercolors on the groom's face have faded away over time.

4. Read these sentences from the text.

"China was the eastern end of the Silk Route (also called the Silk Road), some five thousand miles of roads linking Asia, the Middle East, and Europe, along which traders exchanged not only goods and services but also customs and languages. Two-humped Bactrian camels were ideal for carrying the trade goods. Standing seven feet tall at the hump, they can carry great weight, walk on varied terrain with their large feet, and store fat in their humps, converting it to energy or water on long journeys."

Based on this evidence, what can you conclude about what Bactrian camels were used for?

A. Bactrian camels were used to carry aristocrats from place to place.

B. Bactrian camels were used to complete work around the house.

C. Bactrian camels were used to fetch water for their grooms.

D. Bactrian camels were used for carrying trade goods along the Silk Route.

5. What is this text mostly about?

A. the role of grooms in Chinese society a thousand years ago

B. the appearance and purpose of sculptures of a Bactrian camel and groom

C. the importance of Bactrian camels in Chinese society today

D. the methods used by ceramic sculptors in China a thousand years ago

6. Read these sentences from the text.

"The unknown artists who made these sculptures filled them with a lively spirit. The camel twists its neck and opens its mouth to bray loudly. The groom raises his arm as if to control a stubborn camel with invisible reins. Attached to the camel's saddle you can see a water flask, a slab of smoked meat, and a saddlebag with a fanged guardian face."

Why might the author of the text have described the sculptures in addition to providing pictures of them?

A. to indicate that the author is also an experienced artist

B. to point out that all camels are lively and stubborn creatures

C. to provide an interpretation of the sculptures that differs from the unknown artist's interpretation

D. to draw the reader's attention to important details in the sculptures

7. Choose the answer that best completes the sentence.

"Two-humped Bactrian camels can carry great weight, walk on varied terrain with their large feet, and store fat in their humps, converting it to energy or water on long journeys. _____, they were ideal for carrying trade goods."

A. However

B. Therefore

C. Initially

D. In contrast

8. What were two-humped Bactrian camels used for during the time of the Silk Route?

_____

_____

_____

9. Ceramic figures like the Bactrian camel and groom were placed in the tombs of wealthy aristocrats and merchants in China. What purpose did these figures serve?

Support your answer with evidence from the text.

10. The sculptures of the camel and groom reveal that trade was important to the Chinese people over a thousand years ago.

Support this statement using evidence from the text or images.