Travelling the SILK ROAD ANCIENT PATHWAY TO THE MODERN WORLD

What can a journey along the Silk Road tell us about the past?

The *Australian Curriculum: History* at Year 8 asks you to consider how major civilisations of the world came into contact with each other.

One way was through trade. And one of the major world trading routes was the Silk Road.

You are about to go on a journey along the Silk Road of the Chinese Tang Dynasty (618-917). You will see things and learn how civilisations met and mixed. Your task is to report back on what this journey tells you about life at the time, how trade brought different civilisations into contact with each other, and how this contact through trade influenced them. What did they gain from others, and what did they give to others?

You will need to explore some objects that you find during your travel, and you will need to gather other information, and draw conclusions. You should summarise information in a table like this, and use it to create your report at the end of your journey.

| Aspects of life 1000 years ago on the Silk Road | What my journey along the Silk Road tells me about these aspects |
|---|--|
| Trade | |
| Commerce | |
| Economic activity | |
| Diplomacy | |
| Environments | |
| Society | |
| Religious beliefs | |
| Cultures | |
| Innovation/ Inventions | |
| Art | |
| Music | |
| Ideas/Knowledge | |



Here is some information before you start. Read it, then start your journey by meeting your special travel companion, and studying the map on the next pages. **Good luck with your journey!**

What is the <u>Silk</u> Road?

The name Silk Road does not refer to a road at all, but a network of trade routes between eastern and western Asia, with links to routes leading north and south. It includes a variety of environments, but is largely desert and mountain. Travellers rarely journeyed across all of Asia. Instead, a camel driver might make the run from one market to the next, then trade or transfer goods to others traveling a different stretch. Depending on the time of year and the destination, a caravan might cross snowy mountains or blazing hot desert. Hunger, thirst, sandstorms, sunstroke and robbery were just a few of the dangers travellers faced on the trail.



Meet your companion

Let's look a bit closer at the camel — your most important companion on the journey.

.....



- **1** Give your camel a name.
- 2 Why is the camel such a good animal for the trip? Look at the eight features highlighted. Explain how each feature makes the camel so good for the task of carrying goods along the Silk Road. You can check your answers on the on page 13.
- **3** You will also need a passport. Here is one.

As you arrive at each of the four main cities you will visit during your journey you need to get your entry stamped and recorded. To do this you enter the name of the place into the Entry page. Then, after you have explored the objects and other information in the city, create your own exit stamp design — this will be something that symbolises one main thing you have learned about that city. For example, with Baghdad it may be a book; or in Turfan a part of the irrigation system called a karez.

4 Now look at the map of the journey and summarise the main stages of your route. You will then be ready to start.

| PLACE 1 | PLACE 2 |
|-----------|-----------|
| Entry | Entry |
| Departure | Departure |
| | |
| | |
| | |
| | |
| | |
| PLACE 3 | PLACE 4 |
| Entry | Entry |
| Departure | Departure |
| | |
| | |
| | |
| | |
| | |

Adapted to the harsh desert conditions of Central Asia and the Middle East, camels made ideal pack animals for travel along the Silk Road. These hardy creatures thrived on tough desert plants. They could carry more weight than horses or donkeys – as much as 136 kilograms. And they needed less water. A loaded camel could sometimes go for 15 days without a drink.

DESERT VOYAGER

The Route

Your journey follows one of the main Silk Road trade routes. On a modern map, it leads from Xi'an (in central China), to Turfan (in north-western China), and then on to Samarkand (in Uzbekistan), and Baghdad (in Iraq). Read the text boxes, and use an atlas if necessary to mark these places on the map. One example has been done to help you.

XI'AN

More than a thousand years ago, Xi'an was the capital of China and the largest city in the world. From here, camel caravans bearing Chinese silk set out for trade with the west.

YELLOW RIVER

Near Lanzhou, China, travellers ferried across the Yellow River, which flowed across the route from east to west.

GOBI DESERT

Silk Road traders skirted the enormous Gobi Desert, which stretches about 1 600 kilometres) from east to west.

TAKLIMAKAN DESERT

the edge of the dreaded Taklimakan Desert, moving mostly at night to avoid the scorching sun.

TURFAN

Turfan is an oasis city, surrounded by mountains and desert. For many centuries, markets here provided food and drink to weary travellers and traders.

TIANSHAN RANGE

Two mountain ranges form a rocky wall between east and west: the Tianshan and the Pamirs. Travellers climbed the passes between these peaks, often picking their way along icy or snow-covered trails.

SAMARKAND

This prosperous city was the homeland of the Sogdian people, who ran a vast trading network along the Silk Road. Merchants of many cultures mingled here, exchanging goods and ideas.

.....

ZAGROS MOUNTAINS

Caravans wound through the Zagros Mountains on an ancient road that ran along narrow valleys and across rough terrain.

AMU DARYA

The Amu Darya is a powerful river that runs from the Pamir Mountains to the Aral Sea. Travellers forded the river, avoiding the dangerous currents of summer and spring.

BAGHDAD

This city was once the capital of the Islamic world and a remarkable centre of learning. Baghdad scholars studying maths, astronomy and medicine helped form the foundation for science in the West.

3

STOP 1

Xi'an

ARRIVING

Enter the name of this city into your passport.

DESCRIPTION

Your journey along the Silk Road begins here in massive Xi'an, the largest city in the world.

This metropolis is home to nearly a million people, and another million live just outside the imposing walls. Imperial buildings, temples and markets line the streets, and the city buzzes with activity. Foreign merchants, ambassadors, scholars and musicians flock to this urban centre, stocking the markets with exotic goods and filling the streets with sights and sounds from distant lands.

GATHERING THE XI'AN OBJECTS

Look at these objects that you see in Xi'an. Answer the questions about them. Do not worry if you are not sure what they are, or if you cannot answer some questions. You will get more information later that will help you understand them.

Now look at the additional information on the next page to help you with those answers, and also to:



- Create a final caption for each object.
- Decide what aspect of life in the summary table on page 1 each object is relevant to (e.g. religion, economy, culture, etc.)
- Decide what it tells you about those aspects in your summary table, and add the information and ideas to your table.
- Create a symbol that summarises what you have learned from Xi'an and use it as your exit stamp on your passport.



- **1.1** What are these objects in the pot?
- **1.2** What is happening to them?
- **1.3** Why would people be doing this?



1.6 What are these?**1.7** What is special about them?





- **1.4** What is this?
- 1.5 What is it used to produce?



1.8 What are these?



- **1.9** What does this show?**1.10** What has it got to do with the objects in 1.8?
- 1.11 Who is this?
- **1.12** Why would there be a statue of this person along the Silk Road?



MAKING SILK

Workers sort silk moth eggs onto trays, which are then stored on dry, shaded racks. As the eggs warm, silkworms begin to hatch.





As silkworms hatch, they are placed on trays with chopped mulberry leaves—their favourite food. The tiny caterpillars are fragile and must be kept away from drafts, loud noises, vibrations and even strong smells.

Silk farmers tie together bundles of twigs to make frames where the silkworms will spin their cocoons. The caterpillars spend several days wrapping themselves in soft filaments that harden as they contact the air, producing fluffy cocoons.

.....





Workers collect cocoons in baskets. The caterpillars inside must be killed to prevent them from breaking the silk filaments, so cocoons are dunked in salt water, steamed or baked.

Cocoons are dunked in hot water to loosen the filaments, several of which are pulled together to form a thread being wound on a reel. A single, undamaged cocoon can unwind into a silk filament about 900 meters long! Cocoons immersed in boiling water shows how the loosened ends of silk filaments from many cocoons are wound together into threads. The fewer the filaments, the finer the threads (and thus silks).

.....



Workers stretch bundles of silk thread called skeins—onto a wooden frame and then rewind them on smaller reels.

Ultimately, weavers use silk threads on their looms, producing a wide array of patterned silk fabrics.



There were many ways Chinese silk makers would decorate their fine fabrics—from designs embroidered, or sewn, onto finished cloth to a range of thread-dying techniques used at different stages of the weaving process.

B RELIGIONS

The Silk Road routes also helped the spread of religious beliefs. Travellers who wanted to maintain their faiths during their long journeys built shrines and temples along the way—and in the process introduced locals to foreign beliefs. In some instances, missionaries established religious communities for the travelling faithful and recruited converts in new lands. Here are some of the many different religions that you could find along the Silk Road:

ZOROASTRIANISM Origin: Iran, c. 500 Bc. A religion that stresses the need for people to do good deeds to keep evil away.

DAOISM AND CONFUCIANISM Origins: China, c. 550 BC. Daoism stresses 'right living'. Confucianism stresses the importance of mutual obligations and ethical behaviour.

NESTORIANISM Origin: Turkey, c. AD 430. A sect of Christianity.

JUDAISM Origin: Israel, c. 2000 BC. The religion of the Jews.

MANICHAEISM Origin: Iran, c. AD 250. A religion that stresses the doing of good rather than evil.

ISLAM Origin: Saudi Arabia, c. AD 600. The religion of Muslims.

BUDDHISM Origin: India, c. 450 BC. A philosophy that stresses that people achieve nirvana (a state of being free from suffering) when they do no harm (actions that produce pain and grief) in their lives.

CHINESE BUDDHA

Buddha statues have been influenced by both Chinese and Indian traditions. A Chinese-created statue would show Buddha dressed in loose-fitting Indian garments, but with a Chinese twist: instead of allowing the clothing to reveal much of the body, the usual practice in Indian depictions of Buddha, the Chinese artist focused more on the drapery itself, common in Chinese art.

D MUSIC

Drumbeats rhythmically pounding in the distance, airy notes from a flute drifting by on the breeze, gentle tones from a bow drawn against strings, all punctuated by the sharp clash of cymbals—these made up the soundtrack of Xi'an during the Tang dynasty. Indeed, music was a constant feature of life in Xi'an, enhancing rituals, telling stories and bringing communities closer together through festivity and celebration. Nations to the west sent musicians and orchestras, and Chinese musicians incorporated what they heard into their own rhythms and melodies.

E ROAD MUSIC

Musicians travelled from far and wide to perform in Xi'an. Since travellers on the ancient Silk Road often couldn't understand each other, music allowed them to communicate and interact. It also served as a means to spread religious beliefs, such as with popular Buddhist chants and musical stories promoting Islamic values.

5

STOP 2 Tur

Turfan



GETTING THERE

After leaving the fertile lands around Xi'an, prepare to enter the harsh, unforgiving deserts to the northwest. Travel is slow and tedious through the shifting sand dunes, some almost as tall as a skyscraper! Watch for the brilliant red cliffs called the Flaming Mountain—when the sun beats down on them, they appear to shimmer and move as if on fire.

ARRIVING

Enter the name of this city into your passport.

DESCRIPTION

After months spent baking under the blazing sun, the caravan has reached Turfan. At last, here is a lush oasis offering refuge from the harsh Taklimakan Desert. Turfan is on the edge of a desert, but irrigation systems allow farmers to grow acres of crops.

Ingenious irrigation systems bring cool water from nearby mountains, offering you and your thirsty camels a refreshing drink. More important, the water allows farmers here to grow an incredible array of fruits and vegetables. What's not eaten by

Here are typical Turfan night market stalls.

2.1 Identify where you see the various products listed. Draw a line from the name to the product. One example has been done to help you.



residents or hungry travellers will be traded along the Silk Road, reaching kitchens thousands of miles away.

GATHERING THE TURFAN OBJECTS

Look at these objects that you see in Turfan. Answer the questions about them. Do not worry if you are not sure what they are, or if you cannot answer some questions. You will get more information later that will help you understand them.



- **2.6** What does this show?
- 2.7 What is its purpose?
- 2.8 How would it work?

Now look at this additional information on the next page to help you with those answers, and also to:



- Create a final caption for each object.
- Decide what aspect of life in the summary table on page 1 each object is relevant to (e.g. religion, economy, culture, etc.)
- Decide what it tells you about those aspects in your summary table, and add the information and ideas to your table.
- Create a symbol that summarises what you have learned from Turfan and use it as your exit stamp on your passport.

Δ

 Workers construct karez tunnels by punching shafts into the ground near the foot of the mountains where the water table is shallow. They then connect the shafts underground by a long tunnel. The shafts—or wells—are spaced every 30 to 115 feet (9 to 35 meters). They provide access for maintenance and allow people to draw water where they need it.

> Small dams at karez outlets create reservoirs for irrigation or drinking water.

Karezes tap into water trapped in porous rock underground. Because such water sources rely on both rainfall and melting snow in mountains, karezes can supply water even during a drought.

Karez tunnels carry water down a slight, consistent slope. Some of these tunnels are 30 miles (50 kilometers) long!



Karezes at Turfan carry water trapped beneath the mountains to lush fields miles away in the desert. Since karezes rely on gravity to move water underground, no pumps are needed and little water is lost to evaporation. These ingenious systems, or perhaps other irrigation schemes, transformed ancient Turfan into an important Silk Road waypoint, providing water for fruit orchards and thirsty camels alike.

B Keeping fruit fresh under the desert sun is no easy task. Merchants at desert oases like Turfan sometimes packed melons and other fruit in lead containers filled with snow and ice from the mountains before sending them along the Silk Road.

C People all along the Silk Road used skins and furs as clothing, but Chinese merchants had a particular

interest in animal tails for more symbolic purposes: Chinese military officers might wear them as badges of honour, or court officials as signs of their authority.

Colourful and dramatic, bird feathers were important trade items on the Silk Road. Vibrant pheasant and peacock feathers from southern Asia made their way north to China and central Asia where they were used in military insignias, hats and parasols, as well as in fans and brushes.

E Even today, brilliant gems and other natural products such as ivory fetch high prices. Political envoys frequently brought precious items ranging from walrus tusks to emeralds as gifts to foreign rulers.

F People have long sought ways to spice up their meals. Salt, pepper, sugar, mustard and other condiments were much desired from India to Persia to China. Many of these additives also had less familiar uses as drugs, perfumes, preservatives, animal repellents, cosmetics and aphrodisiacs.

G The pleasing aromas of burning incense and scented perfumes disguised the odours of daily life. Fragrant aromatics enhanced rituals

and offered the proceedings a magical air. Many such aromatics originated in southern Asia—particularly in Indonesia—but could be found in marketplaces all along the Silk Road.

H Many bright, beautiful pigments made from minerals were used in both paints and cosmetics across the ancient world.

Even today, many textile makers prefer to use natural dyes made from plants, and sometimes animals, to colour their cloth. Since the plants and animals that produce many of the most colourful, durable dyes live only in warmer climates, dyes from southern countries were usually traded to northern ones.

J Sheep wool is familiar enough, but what about camel and yak wool? Central Asian herders long sent textiles and rugs made from camel, yak and sheep wool to marketplaces all along the Silk Road.

Cotton was first domesticated thousands of years before the Silk Road and fine cotton weaves were known across Asia. By AD 700, Turfan and neighbouring outposts in Central Asia were producing cotton fabrics that were particularly popular in China.

STOP 3 Samarkand

GETTING THERE

Follow the northern edge of the Taklimakan Desert. Move at night to avoid the scorching sun.

Climb the rugged passes of the Tianshan Range. Beware! Bandits lurk along the steep, muddy trails and icy streams. Trek down to the green Ferghana Valley. Enjoy sweet fruit and fresh bread while your camels dine on alfalfa.

ARRIVING

Enter the name of this city into your passport.

DESCRIPTION

Samarkand became a major city more than 2,000 years ago as the capital of Sogdia, a group of kingdoms in present-day Uzbekistan and Tajikistan. From this region, Sogdian merchants travelled widely. Turfan, Xi'an and many other Chinese cities had thriving Sogdian communities that channelled wealth to relatives back home.

GATHERING THE SAMARKAND OBJECTS

Look at this object that you see in Samarkand, and the story that is told to you. Answer the questions about them. Do not worry if you are not sure what they are, or if you cannot answer some questions. You will get more information later that will help you understand them.

Now look at this additional information on the next page to help you with those answers, and also to:



3.1 What is this object?**3.2** Why might it be

In ancient times a ferocious lion lived in the forest, killing without remorse. The other animals were terrified. To stop the lion's deadly hunts, some animals offered to provide him with food each day. Some animals would still die, of course, but the rest would live in peace. The lion agreed and enjoyed months of the easy life.

One day it was the hare's turn to present himself to the lion. Although small, the hare was very crafty. "Lion, lion," the hare cried out as he approached. "Help me, help me! Another lion is trying to eat me. But I am to be your dinner! You must stop him!"

Furious that someone was trying to steal his food, the lion demanded, "Take me to the thief. I will make him pay for this mischief!"

The hare and the lion made their way through the forest, and eventually reached a deep well. There the lion looked down and saw his own reflection in the water. Thinking he had found the creature who tried to steal his food, the lion jumped down, ready to fight.

Alas, the lion never came out of that well, and the animals lived in peace from that day on.



- **3.3** What is this story about?
- **3.5** What is the message or moral of this story?
- 3.6 Why would people tell such stories along the Silk Road?
- Create a final caption for each object.
- Decide what aspect of life in the summary table on page 1 each object is relevant to (e.g. religion, economy, culture, etc.)
- Decide what it tells you about those aspects in your summary table, and add the information and ideas to your table.
- Create a symbol that summarises what you have learned from Samarkand and use it as your exit stamp on your passport.



8

A Travellers along the ancient Silk Road brought stories with them that still delight audiences today.

B We may take it for granted today. We may even claim we can do without it. But of all the treasures that moved along the Silk Road, none was more powerful than paper. Light, flexible and inexpensive to make, paper made an ideal surface for recording ideas. As paper spread from China to the Middle East, it opened up a remarkable age of writing, reading and learning.

С

TIMELINE ON THE TRANSMISSION OF PAPER TECHNOLOGY

| вс 50 | Chinese craftsmen make the first paper. |
|-------------------|--|
| ad 100 | Chinese people begin to use paper for writing. |
| ad 300-750 | The art of making paper spreads west as far as Samarkand. |
| ad 795 | A paper mill is founded in the city of Baghdad. |
| AD 1100-1200 | The first European paper is made by Islamic craftsmen living in Spain. |

Paper is made from plant material or cloth that is mashed to pulp and then formed into a sheet. These Chinese drawings from the early 1600s show how to make paper from bamboo. **E** As paper spread from east to west along the Silk Road, books became more bountiful than ever before. Chinese artists learned to smear ink on carved wooden blocks, which they used to print thousands of pages very quickly. When paper came to the Islamic world, a passion for reading and writing blossomed there, and Islamic scholars took the lead in the study of science, language and literature.

F In the 700s, paper was introduced to the Islamic world, where it was first used for clerical tasks, such as keeping tax accounts and other records. A few centuries later, even a text as sacred as the holy Koran was often copied on paper.

G The arrival of paper helped science and scholarship blossom in the Middle East. This medical text is based on the work of Alhazen (AD 965–c.1040), an Arab scientist who is sometimes called the father of modern optics.





المانية المولية بالمؤاليات المصلاح م م م م حصد غرار الذهر المسلمات م مدراليا والمعالم المدينة والمولية من تلطق مدريد في قريق والمالية منه الممانية المولية المولية المحلم مريد المولية والمولية المولية المولية المولية المولية المولية المحلم



1. Cut plants or pieces of cloth and soak them in water.



Boil the plants and pound them to a pulp.



3. Mix the pulp with water in a vat. The tiny fibres will hang suspended in the water. Dip a paper mould in and lift it out. It will pick up a thin layer of pulp, forming a sheet.



4. Turn out the wet sheet of paper and press it to squeeze out the water.



STOP 4 Baghdad

GETTING THERE

Mount your camel and wade across the Amu Darya, one of the longest rivers in Central Asia. Trudge along the northern rim of Iran's Great Salt Desert. Watch out for scorpions and snakes. Hike up and over the rugged passes of the Zagros Mountains, then down into the plains of Iraq.

ARRIVING

Enter the name of this city into your passport.

DESCRIPTION

The journey along the Silk Road has taken you thousands of miles from the imperial city of Xi'an, China. At last, here is its western rival: Baghdad, capital of the Islamic world.

Founded in AD 762, this elegant metropolis is known as the City of Peace. Its gleaming palaces and fragrant gardens look down on the Tigris River; foreign goods arrive daily by ship as well as by camel caravan. An illustrious family of Islamic rulers holds court here. Under their patronage, Baghdad has blossomed into a remarkable centre of learning—a meeting place for scholars, scientists and philosophers and a storehouse for knowledge from many lands.

GATHERING THE BAGHDAD OBJECTS

Look at these objects that you see in Baghdad. Answer the questions about them. Do not worry if you are not sure what they are, or if you cannot answer some questions. You will get more information later that will help you understand them.

Now look at this additional information on the next page to help you with those answers, and also to:

- Create a final caption for each object.
- Decide what aspect of life in the summary table on page 1 each object is relevant to (e.g. religion, economy, culture, etc.)
- Decide what it tells you about those aspects in your summary table, and add the information and ideas to your table.
- Create a symbol that summarises what you have learned from Baghdad and use it as your exit stamp on your passport.





4.3 What is this object?**4.4** How would it work?

4.5 What is this object?**4.6** How would it work?

4.7 What is this object?

4.8 How would it work?





Glass catches the light. It can flash crystal clear, or sparkle with colour. When molten, it can be shaped as no other material can: with a puff of air. The art of blowing glass developed in the Middle East around 100 B.C. Centuries later, it reached new heights under Islam. Glass from Baghdad and other Islamic cities travelled over the trade routes toward China, where it was treated as the rarest of jewels. Most glassworkers in the Middle East used the same basic technique to create glass objects They gathered molten glass on the end of a blowpipe and then breathed into it to form a bubble. The bubble could be reheated and reshaped to make different vessels, and decorated with additional tools.

B Glass is made from a mixture of minerals that are melted and blown, as shown here.

- 1 Mix three basic ingredients:
 - Sand, containing large amounts of silica, a hard mineral
 - Soda ash, often made by burning certain plants
 - Lime, obtained by heating limestone
- 2 Heat the mixture in a furnace to about 1 370° C. Lower the temperature, then dip the end of a blowpipe into the molten glass.

3 Blow into the pipe to form a bubble.

4 Shape the bubble by rolling it against a flat surface or pinching, pulling or cutting it with other tools. **C** Artists created these glass samples using techniques from early Islamic times.



Mould –blown Blow the glass into a

mould so the surface

is impressed with a

design.



Applied Dribble a stream of molten glass on top of the surface.



Impressed Reheat the glass and pinch a pattern into it with tongs.

D The most useful device in an Islamic astronomer's tool kit was the astrolabe, a form of calculator that helped chart space and time. With an astrolabe, a scholar could determine the position of stars, find latitude, and predict the times of sunrise and sunset, when mosques would give the call to prayer.

Among the most dazzling treasures of the Abbasid age were its inventions: machines that performed all kinds of tasks, from serving drinks to telling time. One example is a water-powered clock designed around 800 years ago by the Arab inventor Abu al-Izz ibn Ismail al-Jazari. As a court engineer, Al-Jazari devised plans for 50 miraculous gadgets in all, including faucets that spewed wine and water, mechanical peacocks and a robotic musical band.

WATER CLOCK — HOW DOES IT WORK?



Conclusion

THE SILK ROAD TODAY

While caravan merchants of the Silk Road risked their worldly assets transporting goods over mountains and deserts, other traders placed their bets on the sea. To reach China, ships sailing from Baghdad had to travel some 9600 kilometres. The voyage took about six months—yet this was considerably faster than overland travel, which could take as long as a year. Despite the peril of pirate attacks and shattering storms, sea trade expanded and eventually overshadowed the caravan trade.

Your journey to four ancient cities along the Silk Road is complete. But these cities—Xi'an, Turfan, Samarkand and Baghdad—still exist today. In some ways, they have changed dramatically. In others, they remain the same.



A trading dhow, showing how the side planks were stitched together to be watertight

For more information about the National Museum of Australia Silk Road exhibition go to



- http://www.nma.gov.au/exhibitions/travelling_ the_silk_road/home and
- http://www.amnh.org/exhibitions/pastexhibitions/traveling-the-silk-road





The old capital of China remains a thriving, bustling city, home to more than 8 million people. Traditional homes and palaces from many ancient dynasties rub shoulders with newer constructions, including modern facilities for the Chinese space program.

Fruit orchards still dot the landscape of Turfan and the region is still famous for its grapes and wine. Now a city of about 250 000 people-more than half of them are Central Asian people called Uyghurs-Turfan is today a predominantly Islamic city, a shift that began during the height of the Silk Road.

This city of about 600000 people in Uzbekistan bears the marks of its complex political past. Its greatest landmark is the impressive Registan, a square enclosed by beautifully tiled Islamic schools built between about AD 1400 and 1700. But other buildings around the city speak to decades under Soviet rule. which ended in 1991.

The war-torn capital of Iraq remains a centrepiece of the Islamic world, as it was during the height of the Silk Road. But much else has changed. The city was decimated by the Mongols in AD 1258. In the last 100 years the population soared from about 200000 to more than six million. Ongoing conflicts and reconstruction efforts will likely continue to transform the city.

What can a journey along the Silk Road tell us about the past?

DESERT VOYAGER

Adapted to the harsh desert conditions of Central Asia and the Middle East, camels made ideal pack animals for travel along the Silk Road. These hardy creatures thrived on tough desert plants.

They could carry more weight than horses or donkeys – as much as136 kilograms. And they needed less water. A loaded camel could sometimes go for 15 days without a drink.

Camel humps don't store water. They store fat, which provides energy when food can't be found. Bushy eyebrows and long, heavy eyelashes help protect camels' eyes from dust and sand.

Narrow nostrils can close to protect the nose from blowing sand.

Their thick, tough lips can even put up with thorns.

E

Camels eat both grass and salty plants that grow in deserts.

> Wide, padded feet help camels keep their balance on rocky paths and walk across sand without sinking.

A shaggy winter coat helps Bactrian camels stay warm in Central Asia, where temperatures can drop to -29°C. Camel herders shear them and spin the hair into yarn to weave rugs, blankets and bags.

WHAT KIND OF CAMEL?

Two-humped camels like the one shown here are known as Bactrian camels (*Camelus bactrianus*). Another species, the Arabian camel (*Camelus dromedarius*), has one hump. Both animals hauled goods along the Silk Road.

Bactrian camels are fit for the cold climates of Central Asia, Mongolia and China, and they traveled the eastern trade routes. Arabian camels were more likely to be used toward the west. Camel breeders also crossed the two species, producing a hybrid called a *bukht*, which was strongest of all.