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.

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

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.

Most likely, you’ll walk. But don’t go alone. Join a camel caravan—a group of camel drivers and traders who travel together. If you are lucky, a camel will carry your load.

In summer, the temperature can climb as high as 50˚ C in the desert. In winter, it may drop to a bone-chilling -45˚ C. Depending on the location, you may sleep under the sky—or at a Buddhist monastery, a military fort or an inn called a caravanserai. To avoid the heat, you will often travel at night and sleep during the day.

You might pay in bolts of silk, or in coins made of copper or silver. In China, merchants also accept paper bills.

Create a diary or a letter or a report on the journey that covers the main features of the journey listed in the table opposite. Your report can be illustrated to show significant objects, people, places or features of the trip.

### Aspects of life 1000 years ago on the Silk Road

<table>
<thead>
<tr>
<th>Aspects of life</th>
<th>What my journey along the Silk Road tells me about these aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td></td>
</tr>
<tr>
<td>Economic activity</td>
<td></td>
</tr>
<tr>
<td>Diplomacy</td>
<td></td>
</tr>
<tr>
<td>Environments</td>
<td></td>
</tr>
<tr>
<td>Society</td>
<td></td>
</tr>
<tr>
<td>Religious beliefs</td>
<td></td>
</tr>
<tr>
<td>Cultures</td>
<td></td>
</tr>
<tr>
<td>Innovation/Inventions</td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Ideas/Knowledge</td>
<td></td>
</tr>
</tbody>
</table>

How far is it? 7400 kilometres.

How long will it take? At least half a year.

How hot and how cold will it get? In summer, the temperature can climb as high as 50˚ C in the desert. In winter, it may drop to a bone-chilling -45˚ C.

How will you travel? Most likely, you’ll walk. But don’t go alone. Join a camel caravan—a group of camel drivers and traders who travel together. If you are lucky, a camel will carry your load.

How will you pay for food and supplies? You might pay in bolts of silk, or in coins made of copper or silver. In China, merchants also accept paper bills.

What will you do at the end? Create a diary or a letter or a report on the journey that covers the main features of the journey listed in the table opposite. Your report can be illustrated to show significant objects, people, places or features of the trip.

Good luck with your journey!
Meet your companion

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

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 as 136 kilograms. And they needed less water. A loaded camel could sometimes go for 15 days without a drink.

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.
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.

**TAKLIMAKAN DESERT**

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

**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.

**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.

**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.

**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.

**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.

**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.

© National Museum of Australia and Ryebuck Media 2012
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.

1.1 What are these objects in the pot?
1.2 What is happening to them?
1.3 Why would people be doing this?
1.4 What is this?
1.5 What is it used to produce?
1.6 What are these?
1.7 What is special about them?
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?
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.
- **Manichaeism**: Origin: Turkey, 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.

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-dyeing techniques used at different stages of the weaving process.
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 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.

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.

[Images of night market stalls with various items labeled]

<table>
<thead>
<tr>
<th>skins</th>
<th>feathers</th>
<th>gems</th>
<th>fruit, vegetables and nuts</th>
<th>spices and condiments</th>
</tr>
</thead>
<tbody>
<tr>
<td>dyes</td>
<td>aromatics</td>
<td>pigments</td>
<td>fabrics and textiles</td>
<td>medicines</td>
</tr>
</tbody>
</table>

2.2 What is this object?
2.3 What do you think it does?
2.4 How would it work?
2.5 What would we use today?
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.
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.

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.

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.

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.

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.

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.

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.

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.
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.

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.

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.

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 important?
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.
**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.

**C** **TIMELINE ON THE TRANSMISSION OF PAPER TECHNOLOGY**

<table>
<thead>
<tr>
<th>Period</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BC 50</strong></td>
<td>Chinese craftsmen make the first paper.</td>
</tr>
<tr>
<td><strong>AD 100</strong></td>
<td>Chinese people begin to use paper for writing.</td>
</tr>
<tr>
<td><strong>AD 300–750</strong></td>
<td>The art of making paper spreads west as far as Samarkand.</td>
</tr>
<tr>
<td><strong>AD 795</strong></td>
<td>A paper mill is founded in the city of Baghdad.</td>
</tr>
<tr>
<td><strong>AD 1100–1200</strong></td>
<td>The first European paper is made by Islamic craftsmen living in Spain.</td>
</tr>
</tbody>
</table>

**D** 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.
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.

4.1 What is this object?
4.2 How would it work?
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?

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.
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.

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.

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 1370°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.

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.

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.

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.

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.

**WATER CLOCK — HOW DOES IT WORK?**

A scale sits in the center of the clock face. As water flows steadily from the upper tank to the lower tank, a float drops, pulling a system of pulleys that cause the scale to turn. At the scale stops, a pen moves along an arc, indicating the time of day. The pen can be adjusted to point to different areas in different seasons, since the length of a day changes over the course of a year.

© National Museum of Australia and Ryebook Media 2012
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.

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 600,000 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 centerpiece 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 200,000 to more than six million. Ongoing conflicts and reconstruction efforts will likely continue to transform the city.

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

© National Museum of Australia and Ryebuck Media 2012
Wide, padded feet help camels keep their balance on rocky paths and walk across sand without sinking.

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.

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

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 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 as 136 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.

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

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.
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!
أهل مئة عشر أَلَّا لَهُم خَلِيفَةٌ
فَالْفَسَاطَةٌ مَّلْقَافَاةٌ
بِالْوَرِيفَا بِأَلْجَوْرِ بِرَوْدِي
عَرْيَكَ إِلَى إِسْتَطَاعَةِ
وَمَيْرَانَ لَمْ كُنْ عَرُبَّيْنَ
WATER CLOCK

How does it work?

A scribe sits in the center of the clock face.

As water flows steadily from the upper tank to the lower tank, a float drops, pulling a system of pulleys that cause the scribe to turn.

In the original design, a servant emptied the lower tank and refilled the upper tank each day. In this model, an electric pump does the same job.

The clock face is inscribed with a series of arcs. Each arc is divided into 12 parts, roughly representing the hours from sunrise to sunset.

As the scribe turns, his pen moves along an arc, indicating the time of day.

The pen can be adjusted to point to different arcs in different seasons, since the length of a day changes over the course of the year.