HISTORY
TERM 3
TRANSPORT THROUGH TIME
# Transport Through Time

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Transport on Land
Transport
Color the transportation pictures below.
Where do they move? Match the words with the pictures.
INTRODUCTION TO TRANSPORT

1. What is transport?

_________________________________________________________________
_________________________________________________________________

2. Name the three forms of transport.

____________________________
____________________________
____________________________

3. Which form of transport do you think people use most often?

____________________________
____________________________

4a) How do you travel to school each day?

___________________________________________________________

b) How do you think you would’ve travelled to school 100 years ago?

___________________________________________________________

5. Name one form of transport that you have never used before.

_________________________________________________________________

6. Which is your favourite form of transport? ________________________

Why? ____________________________________________________________

_________________________________________________________________
Animals for transport

Many years ago, people had to **walk** to where they wanted to go.

Later, they began to tame wild animals for transport.

Name two ways in which people can use animals for transport.

1. ________________________________________________________________

2. ________________________________________________________________

Horses, donkeys and oxen have been used to carry goods and people for a very long time.

People who live in deserts use camels for transport.

Why do you think camels are a good animal to use for transport in the desert?

___________________________________________________________________

___________________________________________________________________

___________________________________________________________________

Homing pigeons were used to carry messages. Messages would be placed into a small tube and tied to the pigeon’s back or leg. Homing pigeons are able to find their way home from very far places.

Huskies have been used to pull sleds in icy, snow covered areas for many years.
Elephants can also be tamed, trained and used to transport goods. In parts of Asia where there are jungles and no roads and transport is difficult, people use elephants to transport themselves and their goods.

List 3 reasons why elephants are a good form of transport in the jungle.

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
___________________________________________________

Read the diary of Ibn Battuta, a traveller who was born in North Africa in 1304. This diary provides evidence of how important animals were for transport long ago.

Underline all the different animals Ibn Battuta used for transport.
The First Wheel

The invention of the wheel was one of the most important inventions of all time.

The first wheels were wooden discs with a hole in the middle. The axle is the shaft on which the wheel turns.

List two ways the invention of the wheel changed people’s lives.

1. ________________________________________________________________
2. ________________________________________________________________

Carts

The first form of transport to use wheels was the cart.

Carts were used to transport people, goods and animals. The first carts were pulled or pushed by people but later people used animals to pull carts. Carts have _______ wheels and are pulled by_____________ or ______________.

They are used for carrying _________ loads.

Wagons

Wagons are ____________ than carts.

Wagons have _________ wheels and are pulled by oxen or horses.

Wagons are covered with leather or cloth to protect the people and goods from the _________ and __________. The roads were often gravel roads and bumpy and so the wagons were uncomfortable to sit in.
Coaches

Coaches were a kind of wagon with a cover. These covers were usually made of wood. The most common kind of coach was the stagecoach. Coaches were vehicles used to transport people. They had four wheels and seats inside for people to sit on. Coaches were pulled by tow, four or six horses.

![Image of stagecoach]

People once used stagecoaches like we use taxis today.

Activity 1 – The first wheel

1. How did people travel before the wheel was invented?
2. What animal was used to deliver messages during the Persian period?
3. Why were camels used instead of donkeys to cross the desert?
4. What is the difference between a cart and a wagon?
5. Are round wheels better than square wheels? Explain your answer.
6. What are ‘boxes on wheels’?
7. What was used to protect the riders from the harsh elements?
8. Name 3 animals that were used to pull wagons and carts.
The Bicycle

The word bicycle means “two wheels”. The information below shows the history of the bicycle.

The “hobby horse”

The first kind of bicycle was made of wood and had no pedals. The rider used his feet to push the bicycle along. People called it the ‘hobby-horse’.

The Penny Farthing

This strange-looking machine had pedals attached to the big wheel. People called these bicycles ‘penny farthings’ because they looked like two old coins, a penny and a farthing. Penny farthings were difficult and dangerous to ride.
The Safety Bicycle

John Starley developed the safety bicycle. The pedals were attached to a chain that turned the back wheel. It also had inflatable tyres and brakes.

1880s: The safety bicycle

Read for enjoyment:

My granny was born in Johannesburg in 1932. She is 79 years old. She told me how she rode a bike when she was a girl. They called it a “sit up and beg” bicycle because you sat up straight on it with your hands in front of you. You looked like a small dog begging for food when you rode it.

A “sit up and beg” bicycle
The importance of the bicycle

- People can ride bicycles to work and to school instead of walking.
- Today about one in every six people in the world owns a bicycle.
- People use bicycles to deliver things to houses, shops and offices, e.g. postmen, ice-cream sellers.
- The Wright brothers, who were bicycle makers, invented the first aeroplane.
- Bicycles helped change the kind of clothes people wore. Women who rode bicycles began to dress more like men.
- Many things we use in cars were invented for use on bicycles, e.g. inflatable tyres, gears and chains.
- People use bicycles for fun, e.g. bicycle racing, doing tricks.

Activity 2 – The first bicycles

Fill in the correct word. Fill in either “before” or “after”.

1. A bicycle without pedals was invented ______________ a bicycle with pedals.
2. The bicycle with a big front wheel was invented ______________ the safety bicycle.
3. The safety bicycle was invented ______________ the bicycle with no pedals.
4. Why was the safety bicycle better than the Penny Farthing? Start your answer with:
   The safety bicycle was safer than the Penny-Farthing because ______________
   ____________________________________________________________________
   ____________________________________________________________________
The steam engine

The first steam engine was invented by a Scottish man named James Watt. The steam engine was a very important invention. Before the steam engine was invented, people could not travel faster than the speed of a horse.

The steam engine uses steam energy from water that is boiled by a coal fire in the engine. Steam engines were used in trains and in ships.

The train

The greatest success in using steam engines for transport was the development of steam locomotives (trains). George Stephenson invented the first locomotive called "the Rocket" in 1829. It had a steam engine and travelled on railway tracks.

The train could have carriages fitted onto the back of it to make it very long. It could transport very heavy goods and lots of people at the same time. It could not go very fast, but unlike a horse, it never got tired! At first people were scared of using the trains but they soon realised that the steam train was faster than animals. Before cars and aeroplanes were invented, trains were the most important way of transporting goods and people over long distances.
How trains changed people’s lives

- Trains move people and goods quickly.
- Farmers get fresh goods to markets much faster.
- People use trains to get to their work.
- Trains help cities to grow in size.

- Railways helped to grow South Africa’s mining towns.
- People got jobs working on the railways.
- Steam trains made a lot of smoke. The smoke caused air pollution, which was bad for people’s health.

Activity 3 – The steam engine and the train

1. Who invented the first steam engine?
2. How did the steam engine work?
3. Who invented the first locomotive?
4. What was the first locomotive called?
5. Why was the steam train such an important invention?
The motor car

The first cars used steam engines to make them move. Karl Benz from Germany made the first car with a petrol engine.

The first cars were very expensive. Only a few rich people had cars. A man called Henry Ford started a big car factory in America. He wanted to make cars cheaper for people.

Making cars on an assembly line

- A car is made up of many different parts.
- Workers put all the parts together. This is called assembling the car.
- Workers add parts to the car on an assembly line.
- The car moves to the next worker who adds another part.
- Workers keep adding parts until the car is made.
- Workers can make cars more quickly using an assembly line.
The motor car comes to South Africa

The first car in South Africa was demonstrated to President Paul Kruger on 4 January 1897. The people were excited about the public demonstration in Johannesburg.

People had to pay 25 cents each to be the first people to see the first car in South Africa. The advertisement said that the motor carriage had the following advantages:

- No more horse sickness
- No more expensive food for the horses
- No broken harness (straps)
- No lazy grooms
- No runaway horses
- The motor car could stand in the street without being looked after
How the motor car changed people’s lives

1. Cars help people travel to their work.
2. People can live much further from their work.
3. Motor transport changed the size and shape of cities.
4. Motorways between big cities make travelling quicker and easier.
5. Big trucks carried goods between cities.
6. People used buses and taxis.
8. There were car accidents.
9. Road transport was often quicker than train transport.
10. Cars went to places that had no railways.
Activity 4 – The first car

Look at the poster advertising the first motor car and then answer the questions.

1. What other name is used for the motor car?

2. Why do you think the advertisers used this name?

3. Why do you think the advertisers say that the car is better than old types of transport?

4. To whom was the first car in South Africa presented on 4 January 1897?

5. Would you like to drive a car like this one? Why or why not?
Common forms of transport of people and goods today

Invention like the car and the train have changed our lives. They helped us to get to places faster and cheaper. We can also transport goods more easily. But cars, trucks and trains have brought problems too.

Activity 5 – Case study

Read the newspaper article above and answer the questions:

1. Name 2 health problems the gases from the car can cause.
2. Why are these gases bad for the environment.
3. Write a sentence to explain global warming.
Transport on land then and now

Some forms of transport from long ago are still used today. Other forms of transport were developed recently. We call transport that was developed recently, modern transport. Modern transport is used now, in the present day. Modern transport is faster than the transport used long ago. Modern transport on land needs lots of good roads made from tar to travel on.

Activity 6:

Look at the following pictures and answer the questions below:

- Picture 1: A man in a cart being pulled by a horse.
- Picture 2: Cars in traffic jam on a highway.
- Picture 3: Trucks on a highway.
- Picture 4: A taxi accident.
- Picture 5: A pothole in the road.
1. Copy this table into your workbook. In the second column, fill in the number of the picture or pictures that match the description in the first column.

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2. What is the main advantage of old forms of transport?

3. What is the main advantage of modern transport?

4. Look at pictures 2, 4 and 5. What are the 2 main disadvantages of modern transport?

5. Write down two ways in which transport has changed over time?

6. Think of a train and oxen carts:
   6.1 What is the same today as it was in the past?
   6.2 What is different today from the past?
Rafts, canoes and reed boats

Long ago, people made transport vessels out of wood and reeds to transport themselves and their goods on water. They used wooden oars and human muscle to move the vessels forward. The oldest type of boats were rafts, canoes and reed boats. They were used for the transport on rivers, lakes and the sea.

Important words

- **raft**: a small, flat object that floats on water
- **paddles**: objects people use in water to move a canoe
- **canoe**: a narrow wooden boat
- **sails**: a large piece of cloth that blows in the wind and moves objects

Rafts

The first kinds of water transport were **rafts**. People from Egypt made rafts by tying together bundles of reeds. Rafts floated and moved with the flow of the river.

*A raft made from bundles of reeds*
Canoes

Canoes
People did not always want to float down a river. They made smaller wooden boats they could move with a pole or paddles. These wooden boats were canoes. The first canoes were made from trees. People cut out some of the wood to make a place to sit.

This canoe is a mokoro from Botswana.

Reed boats

Reed boats
People used reeds to make boats. Reed boats were different to reed rafts. They looked more like canoes.

A modern reed boat from South America
The first sailing ships

Many years later, ships were invented. People used the wind to move boats. They made sails from cloth. The fixed the sails to tall poles called masts. The wind blew into the sails and pushed the boats through the water.

Arab dhows

Dhows
Long ago, Arab sailors travelled across the Indian Ocean in boats called dhows. A dhow is a sailing boat with one large sail in the shape of a triangle. People still use dhows today.

Chinese Junk

The Chinese invented a ship called a junk. The Chinese also invented the rudder. The rudder steers the boat.

Caravels

European countries used caravels to explore the world. Caravels are large boats that can sail across the oceans.
British tall ships

Tall ships were sailing ships that could travel long distances and were used to explore the seas and transport valuable goods such as tea and cloth from Asia to Europe. It has three more tall masts that support the sails.

Activity 7

Answer the questions in your workbook.

1. How did the following move on water?
   a. Raft
   b. Canoe
   c. Caravel

2. Identify the three sailing ships in the drawings below.

3. List three ways you think water transport changed people’s lives.
Activity 8 - Sailing to South Africa

This ship is called The Chapman. The ship arrived in Algoa Bay (now Port Elizabeth) in April 1820.

This is the story of a young boy, Henry, who travelled with his family and many other families, from England to South Africa in 1820 on a ship like this one.

We were excited about going to a new country to start a farm. My father took some pigs, chickens and a few sheep with us. They were kept in big wooden crates on the deck. We were going to build our new house ourselves when we got to the Cape, so my father took his carpentry tools with him, and seeds so we had something to plant.

The ship was very crowded. Our whole family shared one cabin. The journey took a long time, about four months, and I sometimes got very bored and longed to be on land again. Once there was a great storm and huge waves crashed onto the deck. I was afraid, but the sailors kept the ship and us safe and the storm passed.

With so many people on board, we had to be very careful to keep everything as clean as possible. My brother and I had to wash the floor of our cabin every day with seawater. There wasn’t much fresh water and it had to be kept for drinking. When we arrived in Algoa Bay we were very thankful. We anchored in the Bay and had to climb down the side of our ship onto small boats that took us ashore. There we saw men with big wagons waiting to take us to the place where we would begin to build our new home and start our new lives.
Answer the questions:

1. What did the family take with them on the ship to set up their farm in South Africa?

2. What were the sleeping arrangements for the family?

3. Why was Henry afraid during the voyage?

4. What was Henry’s job each day on board ship?

5. How did the passengers get onto the shore when they arrived in Algoa Bay?
The first steam ships

Over time steam ships replaced sailing ships for transport on water. A boat with a steam engine could move even when there was no wind.

Early steamboats used paddle wheels to move along. The steam was used to drive the paddle which pushed the boat up and down the river. The paddle wheels were fixed on the side of the steamboat.

Later, ocean steam ships used a propeller instead of a paddle wheel. Propellers were smaller, stronger and more powerful than paddle wheels.
Activity 9 – The steam ship

Answer the following questions in your workbook:

1. How did the invention of the steamship change water transport?
2. How did the paddle wheels make the ships move?
3. Did ocean steam ships use paddle wheels? Explain why or why not?

The most famous steamships in history

The most famous passenger ship was the Titanic. It was an enormous ship that could carry over 2,000 people. Everyone thought it was impossible for it to sink.

The Titanic set sail on 11 April 1912 and all the passengers were very excited. They were sailing from England to America. It was very cold at that time of the year. The skies were clear and the sea was calm, so the ship was sailing full steam ahead, which means very fast. The Titanic crashed into a huge iceberg that made a hole in the ship, and the ship filled up with water. The passengers tried to escape by using the lifeboats, but in that freezing night, and freezing water, most of the passengers drowned. A few people on board survived.

Molly Brown was one of the survivors of the Titanic. She rowed a lifeboat to safety. She later told many stories about how she survived. The stories of Titanic survivors like Molly Brown give us information about what happened during the last minutes of the sinking of the Titanic.
Modern forms of water transport

Today, goods can be transported around the seas of the world in big cargo ships, container ships and oil tankers.

Container ships transport cargo packed in huge containers that are piled onto the deck of the ship. Containers are big metal boxes. Huge cranes are used to load and unload the containers. Nearly everything you buy from overseas arrives in South Africa in a container.

Oil tankers transport oil in huge tanks inside the hold of the ship.

Thousands of cargo ships sail from port to port all around the world today. Cargo ships are built of steel and transport cargo in the hold of the ship.

Ocean liners are passenger ships. They transport people. Liners were the main way people travelled across the world before aeroplanes.
Transport in the Air
Transport in the Air

Aviation or air transport is the mode of travelling by air from one destination to another. Air transport has become a very popular way of travelling to places. Air transport is much faster than any other form of transport, but it is still a very expensive form of transport.

We use aeroplanes, helicopters and hot air balloons for air transportation.

HOT AIR BALLOONS

A hot air balloon has a big bag called an envelope, which is filled with heated air. Below the envelope is a basket in which the passengers can stand. There is a gas burner above the basket, which heats the air in the envelope. Hot air is lighter than cold air. As the hot air rises, it lifts the balloon. The hot air balloon was the first aircraft to carry a human in the air.

The hot air balloon was designed by two French brothers named Joseph and Jacques Montgolfier. Before the Montgolfier's sent people up in their balloon, they sent up a chicken, a duck, and a sheep. These animals flew for 10 min and for about 2km.

On 21 November 1783 the brothers decided to send two men, named Jean-Francois Pilatre de Rozier and Francois Laurent, up in a hot air balloon, which was a success.

Because hot air balloons are not very fast and are dependent on wind direction, they are used mainly for sightseeing these days and not as a reliable form of fast transportation.

AIRSHIPS

Airships are similar to hot air balloons but they are bigger, have engines and can be steered. Instead of using hot air to make them rise, airships use a gas called hydrogen or helium to make them rise. Some air ships could carry up to 50 passengers at a time and could travel long distances. They were even used in the First World War.

The Hindenburg was the most famous airship but minutes before it was supposed to land it burst into flames and crashed to the ground in front of many people. After the crash, people did not want to travel in airships anymore and so manufacturers stopped making them.
AEROPLANES

Wilbur and Orville Wright were two American brothers who were very interested in flying. They first flew a glider which is an aircraft that flies on air currents high in the sky. They then decided to make an aeroplane that had an engine. They designed and built a light but powerful engine which they put in an aeroplane that they had designed and built themselves. On 17 December 1903 they flew the first aeroplane powered by an engine.

During the First World War (1914-1918) and the Second World War (1939-1945), people made great improvements to aeroplanes. Soon aeroplanes were safer and could fly further than they had in the past. By 1941, aeroplanes were using powerful jet engines. After the Second World War, airline companies began to use aeroplanes to transport passengers for long distances.

MODERN FORMS OF AIR TRANSPORT

The Airbus

Today we have large jet airliners that can carry over 500 passengers. The Airbus 380 is a modern passenger jet airline.

Rockets

Rocket technology is one of the most important inventions of the last hundred years. It has given humans the opportunity to travel into space.

In 2002, a South African, Mark Shuttleworth, was the first South African to travel into space on a spacecraft.

Helicopters

Helicopters can fly forwards and backwards and can hover in the sky. This enables them to fly to places that aeroplanes could not fly to. Helicopters are often used by the police and rescue workers to assist people who find themselves in danger.
Activity 10

Look at the advert and answer the questions

1. How long would the flight take from Johannesburg to London?
2. Where would you sleep each night?
3. How much would the flight cost?