



**Teacher Edition**

**AlphaWorld**



# By Land, Sea and Air

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## How to use this book

The AlphaWorld teacher editions support teachers as they guide children's reading and thinking during one or more guided reading sessions. Teachers can observe children as they read and choose from the given suggestions to suit individual needs.

### Before reading

#### Setting the context, front cover and title page:

The suggestions help teachers to set the scene and prepare children for reading the book. Prompts help to determine children's prior knowledge. Where necessary, background information is provided. Teachers are encouraged to check that children understand the vocabulary listed and to discuss the meanings and/or the structures of these words. Previous experiences with similar text types may also be discussed.

### During reading

#### Predict, Read, Reflect:

Questions encourage children to engage with the text by making predictions. The children then read a section of the text and reflect on what they have read. The focus is on the content, language and text features of the book.

#### Observe and support:

Prompts help teachers to focus on the strategies children use as they read. Teachers can then select from and adapt the suggestions according to the needs of the individual child. The suggestions aim to develop a child's reading abilities. Interruptions to the child's reading should be minimal.

### After reading

#### A selection of reading and writing activities:

The last pages of the teacher edition provide follow-up activities and include the assessment focus.

## Selected text features

- Information boxes
- Maps
- Headings and subheadings are distinguished from the text by the use of different sized fonts

## Vocabulary

accurate, airliners, commander, connect, crew, distances, fabric, fleet, information, journey, jumbo jets, landmarks, passenger, sailing, steam trains, travelling

## Setting the context

Discuss the children's personal experiences of ships, planes and trains. Ask them to describe a trip they have made on one of these forms of transport.

## Background information

This book compares and contrasts ways in which people travel by plane, by boat and by train with the difficulties people faced in making such journeys in the past. Information about the first time such journeys were made is provided, as well as details about the difficulties early pioneers of each form of transport faced.



## Front cover

Show the front cover.

*This book is called By Land, Sea and Air.*

*What can you see on the front cover?*

*What do you think this book could be about?*

## Title page

Turn to the title page.

Read the title and author's name together.

*What are the pictures on the title page?*

*What do you notice about them?*

## **Predict**

*This is the contents page. Let's read through it together.*

Discuss any words or concepts that the children have difficulty with?

*What do you think this book is about?*

Turn to page 4.

*This is the introduction. What does an introduction do?*

*Travelling around the world is easy today because you can fly in a plane, sail in a boat or ride in a train. It says that travelling wasn't always so simple. What do you think that means?*

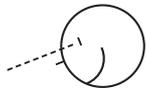
## **Read** to the end of page 5.

## **Reflect**

*What can you see in the photo on the contents page? Why would this photo have been selected for this page?*

*What were the first journeys right around the world like?*

*What was special about them?*



## **Observe and support**

While the children are reading independently, ask one child to read aloud to you.

Can the child read the text fluently?

*Can you read it all together? Try to make it sound as if you are talking to someone.*

## Contents

- Introduction 4
- Around the world by sea 6
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## Introduction

Travelling around the world is easy today. You can fly in a plane, sail in a boat or ride in a train. But it wasn't always so simple.

The first journeys right around the world were difficult and dangerous. The people who made these journeys were doing something that no one had ever done before.



## **Predict**

*The heading on this page is 'Around the world by sea'. Today it is safe and comfortable to travel around the world by sea. Sailors get all the information they need from radios and computers. What do you think this information tells them?*

Turn to page 8.

Read the subheading together.

*Sailing around the world was once very dangerous.*

Look at and discuss the pictures of the ships on this page and compare them to the modern ships on the previous page.

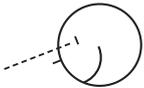
*Why do you think it was once very dangerous to sail on a ship? How would the sailors have known where to go? What gave the ships the power to move?*

## **Read** to the end of page 9.

## **Reflect**

*What did you find out about ships by reading the 'Did you know?' information boxes?*

*Tell me something about ships that caught your attention when reading these pages.*



## **Observe and support**

Can the child explain the changes that have taken place in the development of ships over time?

*Why was it once dangerous to sail around the world?*

*Why is it easier today?*



## Around the world by sea

Today it is safe and comfortable to travel around the world by sea. Sailors get all the information they need from radios and computers. This information tells them which direction to take and warns them about bad weather so they can avoid it. The ships are made of strong steel and have huge engines that push them through the water.



### Did you know?

Queen Mary 2 is the biggest passenger ship in the world. It can carry 2620 passengers and 1253 crew members. It is 345 metres long and it has 14 decks.

### The Queen Mary 2

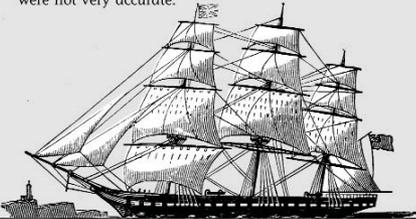
Many people take holidays on large ships that are like giant floating hotels — they have restaurants, swimming pools and movie theatres.

It is easy to sail around the world today, but it wasn't always like this.

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## Under sail

Sailing around the world was once very dangerous. Ships were made of wood, and if they got caught in a storm they could smash against rocks and break up. There were no radios or computers to give sailors information about where they were going. Instead, they had to watch the sky to work out where to go and to see if storms were coming. Some ships got lost because maps were not very accurate.



The ships did not have engines. They needed wind to blow into their sails and push them through the water. If there was no wind the ships could not move, so journeys were long and slow. Sometimes the ships did not go near land for many days. This made it hard to get fresh food and water.

### Early sailing ship

### Did you know?

Sailing ships had no way to keep food fresh, so sailors had fresh food only when their ship reached land. Sometimes sailors became sick from having no fresh food — they could even die.

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## **Predict**

Read the subheading together. Discuss reasons why subheadings are used.

*A fleet of five ships and 280 sailors set out to make the first journey around the world by sea about 500 years ago.*

*Do you think they made it?*

*What might have happened to them?*

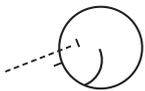
## **Read** to the end of page 11.

## **Reflect**

*What happened when the ships sailed for 96 days without seeing land?*

*Who was the captain of the fleet? What happened to him?*

*Did he complete the journey?*



## **Observe and support**

Can the child interpret the information provided by the map on page 10?

*What does the map show?*

*How do you know which way the fleet went?*

*Can you point to where the fleet started?*

## The first trip around the world by sea

A fleet of five ships with 280 sailors set out to make the first journey around the world by sea. Only one ship and 18 sailors completed the journey, and it took three years.



### Did you know?

The captain of this fleet was Commander Ferdinand Magellan. He set sail from Spain about 500 years ago. Magellan did not finish the journey — he was killed in the Philippines.



At one stage, the ships sailed for 96 days without seeing land. The food supply ran out and the sailors had to eat sawdust, strips of leather and rats.



## **Predict**

*We have a new heading on this page, 'Around the world by air'. What do you think the information in this section will be about? It says that planes today are much safer than they once were. They are made of strong metal and have radios and computers that tell the pilots where to travel. How would radios and computers make planes safer? Turn to page 14.*

*The first planes were made of wood and fabric, and they could travel only short distances.*

*Look at and discuss the pictures of the planes on this page and compare them to the modern planes on the previous page.*

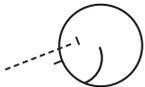
*Why do you think the first planes were not very safe?*

 **Read** to the end of page 17.

## **Reflect**

*What did you find out about planes by reading the 'Did you know?' information boxes?*

*Look at the diagram on page 15. What does it say about airliners in the 1950s?*



## **Observe and support**

Can the child explain the changes that have taken place in the development of planes over time?

*Why was it once dangerous to fly in a plane?*

*Why is it easier to fly in a plane today?*

## Around the world by air

Planes today are much safer than they once were. They are made from strong metal and have radios and computers that tell the pilots where to travel. The computers can warn the pilots about bad weather conditions, or about other planes flying nearby.

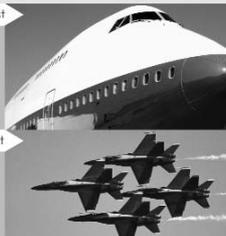
Biggest

### Did you know?

The biggest planes are called jumbo jets. They can carry more than 400 people.

Fastest

The fastest planes can travel faster than the speed of sound.



Planes can fly more than eight kilometres above the ground and travel at more than 1000 kilometres per hour. In just one day, a plane can fly from one side of the world to the other. Many people fly around the world for work or to take holidays. During the flight they watch movies, eat meals and sleep.

It is easy to fly around the world today, but it wasn't always like this.

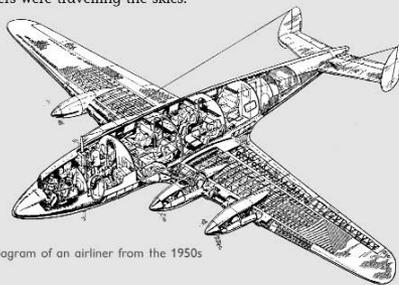


## The first planes

The first planes were not very safe. They were made of wood and fabric, and they could travel only short distances. These planes could not fly very high and were big enough for only one or two people. There was no heating, so flying in these planes was cold and uncomfortable.

The planes did not have radios and there were no computers. The pilot had to watch the land below for landmarks such as buildings and lakes to work out where to go.

But planes developed quickly. By the late 1940s, the first airliners were travelling the skies.



A diagram of an airliner from the 1950s



### Did you know?

The first flight that could carry people took place in 1903 and lasted only 12 seconds. Wilbur and Orville Wright made this flight. Their plane was called The Wright Flier I.



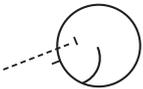
## **Predict**

Read the subheading together. *Will we be reading information about planes? Why do you think so? The first trip around the world by air was attempted by four planes. Look at the photos on this page. Why would it have been a dangerous journey? Do you think all the planes made it around the world?*

 **Read** to the end of page 17.

## **Reflect**

*What happened to these planes on their journey? Did all the crews of these planes survive? Why was it a dangerous trip? Would it be as dangerous today? Why do you think this?*



## **Observe and support**

Can the child point out different text features on the page?

*Where is the 'Did you know?' information box? Where is the subheading? How did you know?*

## The first trip around the world by air

The first trip around the world by air took 175 days. Four planes began this dangerous journey. They had to make long flights over oceans and there was no way of knowing if bad weather was coming.

The planes could not fly as far as planes today, so they had to land many times. Each time the planes landed, they filled up with fuel and supplies. Of the four planes that started the journey, only two flew right around the world.



### Did you know?

One of the four planes that set out to make the first flight around the world crashed into a mountain in the fog. Another crashed into the ocean. Amazingly, the crews of these planes survived.

## **Predict**

Read the heading together. Discuss the purpose of headings and subheadings.

*Many people travel by train today. Railway tracks connect many cities and countries, so people can go nearly anywhere they want by train.*

*Why do you think so many people travel by train today?*

Turn to page 20.

*This subheading is 'The first steam trains'.*

Look at and discuss the pictures of the trains on this page and compare them to the modern trains on the previous page.

*The first trains were driven by steam and were used to pull heavy loads. The steam made the engine work.*

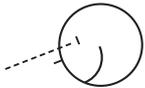
*What is steam?*

## **Read** to the end of page 21.

## **Reflect**

*What does the 'Did you know?' information box on page 19 tell us? What does the map show?*

*Who built one of the world's first steam trains? What was it called? What did it look like?*



## **Observe and support**

Can the child explain the changes that have taken place in the development of trains over time?

*Why is it easy to travel by train today? Why wasn't it always like this?*

## Travelling by train

Railway tracks connect many cities and countries, so people can go nearly anywhere they want by train. Trains have engines that use diesel, electricity or magnets to make them move.

Many people travel by train every day. They take short journeys to and from work, or longer journeys across the country. It is not possible to go all around the world by train — you have to fly or sail across oceans.



### Did you know?

People who travel between England and France by train go through a tunnel under the sea. The tunnel is about 50 kilometres long and took 15,000 workers seven years to build.



Some people take train trips for their holidays. They can live on a train for many days and travel through many countries. Travelling by train is fast and comfortable.

It is easy to travel by train today, but it wasn't always like this.



## The first steam trains

The first trains were driven by steam and were used to pull heavy loads. Steam trains had big water tanks and a fire to boil the water to make steam. The steam made the engine work.



### Did you know?

One of the world's first steam trains was called The Rocket. It was built in England by George Stephenson in 1829.

The Rocket



These trains were not very fast and didn't travel very far, but they were good for moving things like coal and iron ore. Soon they were moving people too, and railway tracks were laid in many countries. The first passenger train pulled six wagons full of coal and about 600 passengers along a road. It took more than three hours to cover 20 kilometres.



## **Predict**

Ask the children to point out the subheading on the page.  
*The first railway to go right across the United States of America was very difficult to build. Why would it have been a difficult and dangerous job?*

Turn to page 24.

*This conclusion will provide a summary of the information in the book. Look at the photos on this page. What do you think the conclusion might say?*

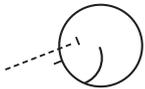
 **Read** to the end of page 24.

## **Reflect**

*What did you discover about the Trans-Siberian Railway by reading the 'Did you know?' information box on page 22?*

*Why has the map been included?*

*Why was the first railway across the United States of America difficult to build?*



## **Observe and support**

Can the child understand the inferences in the text?  
*How has travelling around the world changed over time?*

If the child cannot answer, have him or her look at the photographs and pictures throughout the book. Also have the child re-read each section of the text.

After each section ask:

*Does this tell you anything about how travelling by ship, plane or train has changed?*

## The first railway across a country

Building a railway is a difficult and dangerous job. Trains cannot go up or down steep hills, so bridges and tunnels need to be built.



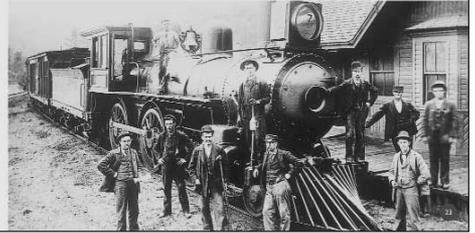
### Did you know?

The Trans-Siberian Railway is the longest railway track in the world. The Trans-Siberian Express takes seven days to cover the 9300 kilometre journey.



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The first railway to go right across the United States of America was very difficult to build. The track went through mountains and across deserts. People started building tracks at opposite sides of the country and finally joined them up in the middle. Men cut tunnels through the mountains and built high bridges. Many of them died doing this work. To celebrate the completion of the railway, the last spike the workers hammered into the track was made of gold.



## Conclusion

Travelling around the world has changed a lot. Today it is safer, faster and more comfortable than ever before. But people are always looking for new and exciting ways to travel by land, sea or air, so who knows what the future will bring . . .



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## After reading

### Being a meaning maker

Encourage the children to support their answers with evidence from the book as they discuss these questions:

*What happened during the first trip around the world by sea?*

*How are modern planes different from the first planes made?*

*Why is building a railway a difficult and dangerous job?*

*Why is it easy to travel around the world today compared to the past?*

*How could we be travelling in the future?*

### Being a code breaker

Explore the following language features:

- Proper nouns: China, Commander Ferdinand Magellan, England, English Channel, France, George Stephenson, Japan, Kazakstan, Mongolia, Moscow, Philippines, Queen Mary 2, Sarah O'Neil, Siberia, Spain, The Rocket, The Trans-Siberian Express, The Wright Flier 1, Trans-Siberian Railway, United States of America, Vladivostok, Wilbur and Orville Wright
- The /f/ sound: difficult, Ferdinand, first, flight, fly, information, Philippines

### Being a text user

Focus on the text features found in the book. Ask the children to provide explanations for each feature or take time to explain and use them if the children are unfamiliar with them.

*What is a contents page? How do you use it?*

*Why are headings and subheadings used throughout the book? How do you know they are headings and subheadings?*

*What is the purpose of the 'Did you know?' information boxes? When do you read them?*

*Where are the maps? What do they tell you?*

*Why is there little written information on the diagram on page 15? How do you interpret the diagram?*

### Being a text critic

*What other forms of travel could have been shown in this book?*

*What research might the author have done before she wrote the book?*

## Responding to text

 Children could retrieve information from the text by filling in a 'Then and Now' table. Children could draw and write this information.

	Then	Now
Ships		
Planes		
Trains		

 Together re-read the last sentence in the book. Discuss ways people might travel in the future. Have the children design an exciting and new way to travel by land, sea or air in the future. Encourage the children to add captions and labels to their design explaining the unusual features of their vehicles.

 Use an atlas to establish the location of places mentioned in the book. The children could label a map of the world with these places. Encourage them to use capital letters when writing place names.

## Writing links

The children could research some interesting facts about ships, planes and trains and write their own fact boxes. These could be compiled into a book titled 'Everything you wanted to know about ships, planes and trains'.

The children could pretend that they are one of the sailors attempting the first journey around the world by sea. They could write a diary entry recording some of their experiences on such a difficult and dangerous trip.

## Possible assessment focus

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Can the children:

- explain the changes in planes, trains and ships over time?
- interpret the information provided in the text, diagrams and the pictures.



whole text activity



sentence activity



word activity

# By Land, Sea and Air

**Topic:** Transport/Technology/Movement

**Curriculum link:** Study of Society

**Text type:** Report – compare/contrast  
(historical)

**Reading level:** 24

**Word count:** 1003

**Vocabulary:** accurate, airliners, commander, connect, crew, distances, fabric, fleet, information, journey, jumbo jets, landmarks, passenger, sailing, steam trains, travelling

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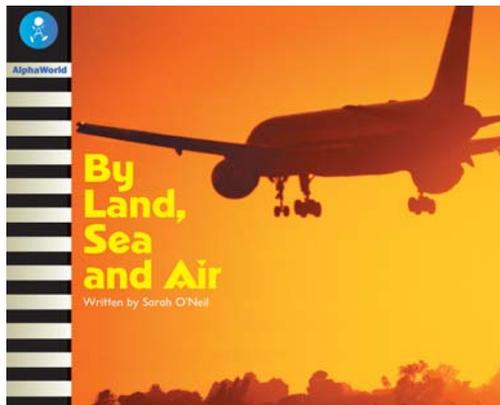
## Possible literacy focus:

- Understanding the changes that have taken place in the development of planes, trains and ships over time.
- Understanding the layout of the text.

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## ESL possibilities:

- Identify repeated use of ‘but it wasn’t always like this’ in text. Discuss how this links sections of the text together.
- Understanding the meaning of subject-specific vocabulary: airliners, crews, decks fuel, landmarks, sailors, supplies.



## Summary

This book discusses three different ways people travel around the world. It looks at the changes that have been made to planes, trains and ships over time.

**AlphaWorld**



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