

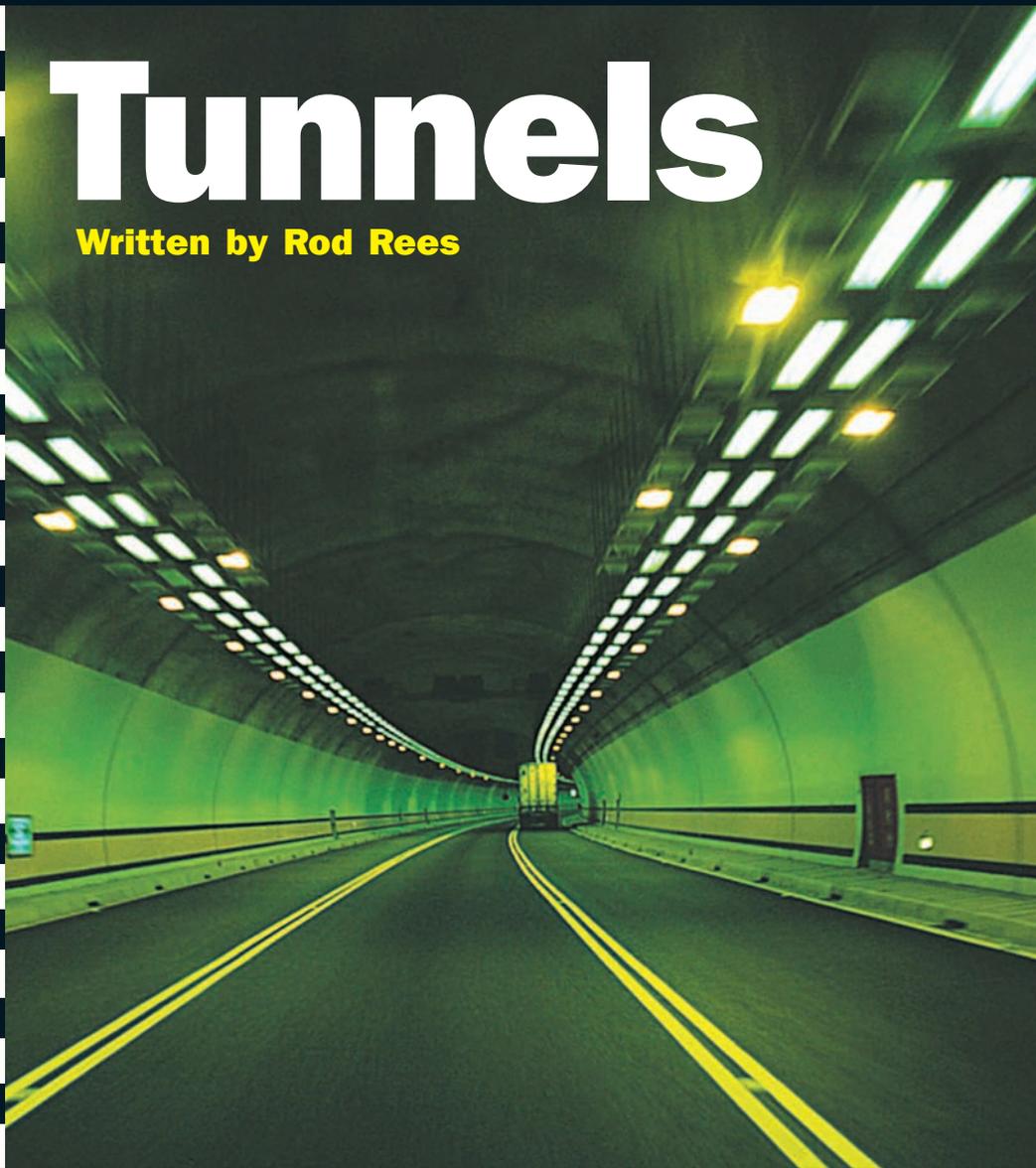


Teacher Edition

AlphaWorld

Tunnels

Written by Rod Rees



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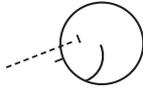
1 2 3 4 5 6 7 8 9
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How to use this book



Before reading: Talkthrough

Talk through the book with the children. Encourage them to predict the text from the cover and the pictures, and to think about the information provided. Direct the children's attention to aspects of the text that may challenge them. Support the children as they deal with these challenges by asking the *Talkthrough* questions on each page.



During reading: Observe and support

Observe the children as they read and encourage them to monitor their own reading. Help the children to use reading strategies and cues to respond to reading challenges that arise in the text. Interruptions to the child's reading should be minimal and focused on a specific learning need.



After reading: A range of comprehension and response activities

To develop children's understanding of the text, select from the activities found on page 12 and the inside back cover. These whole text, sentence and word level activities reinforce the teaching focus of this book. Assessment ideas are provided to assist with further teaching plans.

Selected text features

- Contents page
- Introduction and conclusion
- Text boxes provide extra information
- Colour photographs support the text

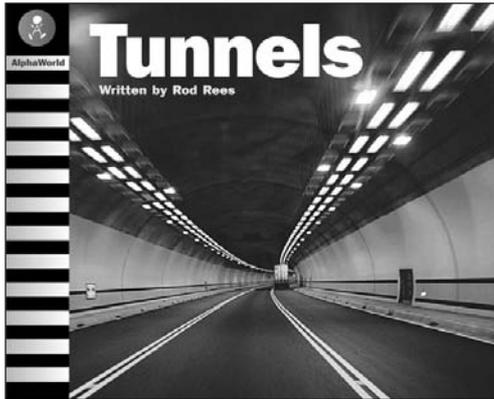
Vocabulary

bridge, crossings, mine, mountains, passage, railroad, shafts, signal, traffic, tunnels, underground

Setting the context

Make a chart listing the things the children know about tunnels and the things they would like to find out about them.

What we know about tunnels	What we would like to find out about tunnels

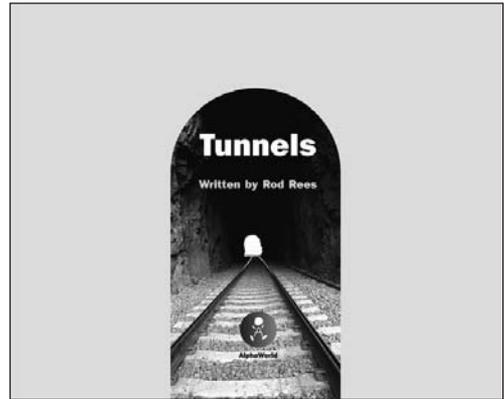


Front cover

Show the front cover.

This book is about tunnels.

It might provide the answers to some of the questions we have about tunnels.



Title page

Turn to the title page.

This is the title page.

What information can you see on this page?



Talkthrough

Turn to the contents page

This is the contents page. A contents page tells us what sort of information will be in the book.

Read out the section headings.

Which part of this book would you most like to read? Why?

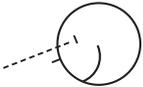
Turn to pages 4–5

Tunnels can go through mountains, under the ground or under water.

Point to the photo on page 5.

What might this tunnel be used for?

People once used hand tools to carve tunnels. What do you think they use to make tunnels now?



Observe and support

Ask any of the children are having difficulty to read aloud to you. Do they attend to paragraph breaks to support expressive reading?

Point out the paragraph break.

Did you notice the extra space between these two lines?

This tells us that a new idea is coming. When you are reading aloud, it is a good idea to pause a little before reading a new paragraph.



Contents

Introduction	4
Road tunnels	6
Railway tunnels	8
Tunnels through mountains	10
Tunnels under the water	12
Walking through tunnels	14
Mine tunnels	16
Conclusion	18
Index	20

Tunnel



Introduction

A tunnel is an underground or underwater passage.

People can build tunnels through mountains, under the ground or under the water.

Long ago, people used hand tools to carve tunnels under the ground. Now, people use powerful machines to make tunnels.

Tunnels have many uses.



People have been building tunnels for thousands of years.



1

2



Talkthrough

Turn to pages 6–7

This section is about road tunnels. What vehicles would use road tunnels?

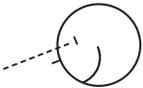
There are signs and lights in road tunnels. Why are they needed?

Turn to pages 8–9

Some tunnels are used by trains. These tunnels are called railway tunnels.

Do you think many people use this train?

How are the people able to see in the tunnel?



Observe and support

Do the children search for a range of information on the page to support their reading?

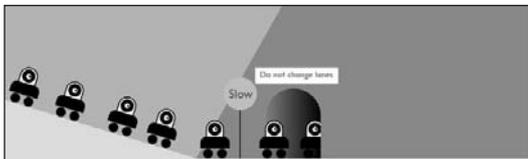
When needed, you might say:

Look at the picture. What does it show you?

What sort of word do we need here?

What would sound right?

What would make sense?



Do not change lanes

Slow

Road tunnels

Cars and trucks use road tunnels.

These tunnels make it easy to move traffic around busy cities. A road tunnel takes the traffic under the ground. Road tunnels can go through mountains or under the water.

1

There are lights and signs in road tunnels to guide the traffic. The signs help people to travel safely in the tunnels.



Railway tunnels

Trains use railway tunnels.

Trains can travel in tunnels under city streets, through mountains or even under the sea.

Railway tunnels have signals that direct the trains. The trains have strong lights so the drivers can see ahead in the dark tunnels. The carriages have lights in them so the people can see.

Many people travel on trains that go under the ground.

Millions of people use underground trains every day.

1





Talkthrough

Turn to pages 10–11

Some tunnels are built through mountains. Why would a tunnel be built through a mountain?

Some tunnels carry water. The water goes to a power station to help make electricity.

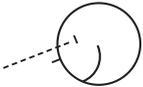
Where has the tunnel in the diagram been built?

Turn to pages 12–13

This section is called 'Tunnels under the water'.

The diagram shows a tunnel for trains that has been built under the water.

How do cars and other vehicles cross the water? Do you think there are tunnels under the water for cars too?



Observe and support

Do the children understand the meaning of the text? Do they get extra information from the text through the diagrams?

Point to the diagram on page 11.

This tunnel has been built through a mountain. The tunnel carries water. Where does the water come from?

Where is it going?

Point to the diagram on page 12.

This tunnel goes under the water. It is a railway tunnel.

Where is the water?

Where is the tunnel?

Where does the train travel?

How do cars cross the water?

Tunnels through mountains

Some tunnels are built through mountains.

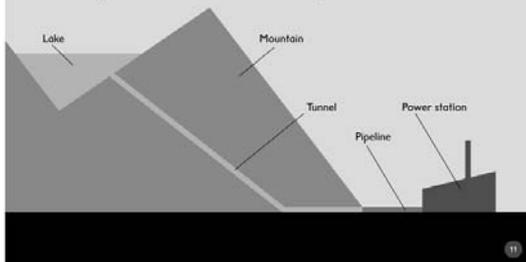
It is much faster to go through a tunnel than to go all the way around a mountain.

Trains, cars, trucks and buses can all use tunnels that go through mountains.



Tunnels that carry water can be built through mountains.

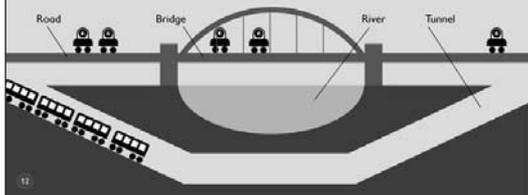
The water flows from the top of the mountain down to a power station where electricity is made.



Tunnels under the water

Some tunnels go under the water.

Tunnels can be built under rivers or lakes or even under the sea. They can be used by buses, cars, trucks and motorbikes. Some underwater tunnels can be used by trains.



Tunnels under the water are just like road or railway tunnels. They have lights and signs to guide the traffic.





Talkthrough

Turn to pages 14–15

These tunnels are for people to walk through. Have you ever walked through a tunnel?

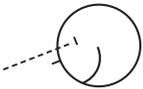
Some tunnels help to keep people safe from traffic. What is the tunnel on page 15 for?

Turn to pages 16–17

These people work in tunnels. They are called miners.

Miners dig tunnels deep underground to look for gold, diamond and coal.

Miners need to be very careful. Why do you think they need to be so careful?



Observe and support

Do the children use a range of strategies to work out new vocabulary?

You read the word 'dangerous'. How did you know that this word was 'dangerous'?

What did you check?

When needed, you might say:

Look at the start of the word. What sound might this word start with?

What would sound right?

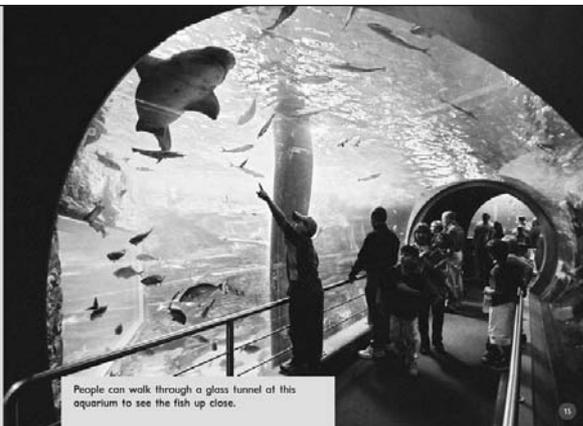
What would make sense here?

Walking through tunnels

People walk through tunnels that go underground.

These tunnels help to keep people safe from the traffic. People use these tunnels to help them get to the other side of busy roads or railway tracks.

Tunnels that people walk through are smaller than road tunnels or railway tunnels. They can be built in many different places.



People can walk through a glass tunnel at this aquarium to see the fish up close.

Mine tunnels

People dig tunnels deep underground to find gold, diamonds and coal. These people are called miners and the tunnels they build are called mines.

Mines can be very wide and very deep. Some mines are so big that trucks and other machines can drive in and out of them.



Mining can be a dangerous job. The miners need to take special care when they are working in deep underground mines. Mine tunnels can flood or collapse. They can catch fire and sometimes harmful gas can fill the air in the mine tunnel and make the miners sick.

In the past, miners used small birds to check if the air in a mine was safe to breathe.





Talkthrough

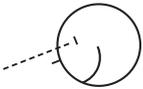
Turn to pages 18–19

This is the conclusion. The conclusion summarises the information covered in the book.

Use the pictures to help predict what might be included in this conclusion.

Turn to page 20

This is the index. It lists some of the words in the book and the pages where you will find information about the words. When would you use the index?



Observe and support

Do the children understand the purpose of an index?

Are the children able to use the index?

This is the index. The words are listed in alphabetical order so that they are easy to find.

What is an index used for?

Where would I find out information about tunnels that are used by trains?

What is the information on page 16 about?

Conclusion

There are many different kinds of tunnels.

People use tunnels to get around busy cities. They can also drive through tunnels in mountains or under the water. Miners can dig tunnels that go deep underground.

People have built tunnels for a long time and use them for many things.



Index

coal 16

mine 16, 17

mountain 4, 6, 8, 10, 11, 18

railway 8, 13, 14

road 6

trains 8, 10, 12

underground 4, 14, 16, 17, 18

under water 4, 6, 12, 13, 18



Tunnels



After reading

Being a meaning maker

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

What are some different sorts of tunnels?

Why do we need tunnels?

How do tunnels help us?

Why do miners need to be careful when they are doing their job?

Are tunnels important? Why?

Being a code breaker

Explore the following language features:

- Punctuation: capital letters, commas, full stops, question marks
- Words with double letters: carry, crossings, different, passage, streets, traffic, tunnels
- Word families: /ight/ as in lights – fight, night, right, sight; /er/ as in river – miners, underground, underwater; /ai/ as in rail – fail, hail, mail, sail
- Words with four syllables: introduction, underwater

Being a text user

What type of text is this? (report)

How do you know?

What does this book teach you about tunnels?

Does this book tell you how to build a tunnel?

Being a text critic

Does the author think that tunnels are important?

What makes you think this?

How would he have found out about tunnels?

Does this book cover all of the different kinds of tunnels there are?

How would you find out?

Responding to text

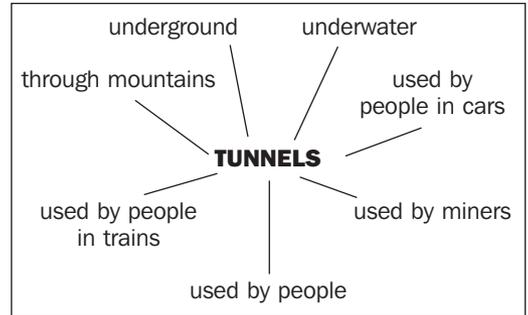
Working in small groups, the children could revisit the chart made before reading. They could write answers to the questions under the column 'What we would like to find out about tunnels'. Encourage them to correct any misconceptions they had before reading the text.

The children could use blocks to build a tunnel. They could then write about the tunnel, explaining its purpose and who it is used by.

The children could quiz each other about where in the book certain information can be found. They could use the index to find the specific information.

Writing links

After reading *Tunnels*, the children could construct a concept web to show what they know about tunnels.



Possible assessment focus

Can the children:

- integrate the extra information provided in the captions and the diagrams with the body of the text?
- provide the most relevant details from the text when summarising a particular section?
- use the index?

whole text activity

sentence activity

word activity

Tunnels

Topic: Science/ Technology

Curriculum link: Study of Society/
Technology

Text type: Report

Reading level: 17

Word count: 440

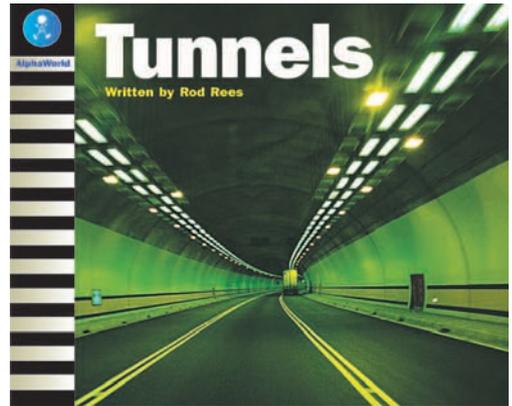
Vocabulary: bridge, crossings, mine,
mountains, passage, railroad, shafts, signal,
traffic, tunnels, underground

Possible literacy focus:

- Gaining extra information from the text through the use of captions and diagrams.
- Summarising information from the text.
- Interpreting the text to explain the importance of tunnels.
- Using an index.

ESL possibilities:

- Identify compound words in the text: railway, underground, underwater.
- Skim through the book to list different types of tunnels and how they are used.



Summary

This book is a report that explores the different types of tunnels that people build, what they are used for and where they are found.

AlphaWorld



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