

# Springboard 6

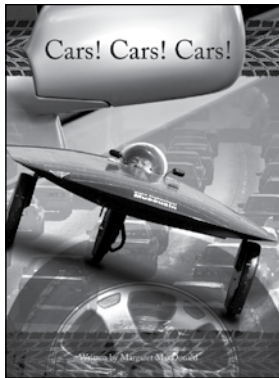


**Cars! Cars! Cars!**

## Fact

Text Type	2400–3000 words	3100–3500 words	3500+ words
<b>Discussion</b>	Do You Like Fast Food?	Do You Like Watching TV?	Would You Travel in Space?
<b>Exposition</b> (Proposition/ Support)	Cars! Cars! Cars!	Litter at the Top of the World	The Polar Bear Problem
<b>Information Report</b> (Cause/Effect)	Bushfires!	The Piece of Paper Path	A Sneeze Is Coming On
<b>Survival Story</b>	Trapped in the Tube	Against All Odds	I Survived a Shark Attack

We have designed these lesson plans so that you can have the plan in front of you as you teach, along with a copy of the book. Suggestions for teaching have been divided into questions and discussion that you may have with students before, during, and after they read. You may prefer to explore the meaning and the language in more detail before students read. Your decisions will depend on the gap between students' current knowledge and the content, vocabulary, and language of the book they are about to read. The more information students have up front, the easier it will be for them to read the text.



## CARS! CARS! CARS!

### Lower level fact

**Text type: Exposition  
(Proposition/Support)**

**Reading age 10.5–11**

**Word count 2400–3000**

Guide questions for teachers are in *italics*.

### Before Reading

Discuss a variety of nonfiction text types. Support students to identify that factual information can be presented as a discussion, exposition, information report, or survival story. Explain to students that an exposition is an explanation of facts.

Examine some nonfiction titles and support students to identify the different text types.

Support students to identify that some of the ways factual information can be presented are as a discussion, exposition, information report, or survival story.

## COVER

### Before Reading

Read the title and examine the cover photograph. Discuss what the book may be about. *What do the cover image and the title suggest about this book?* Invite discussion.

Read the blurb. *What additional information does this give you? What do you expect to find inside this book?* Guide the discussion to build understandings that this book will provide information about both the problems associated with too many cars and possible solutions.

*What do you know about the problems associated with cars?*

*How are cars evolving to address these problems?*

*How might cars be different when you are old enough to drive?*

## CONTENTS PAGE

*Open the book.* Discuss the features of the contents page. *Where would I go to read about solar cars?* Students should respond quickly with the page number. Repeat for other pages. Encourage quick responses. *What do you know about information books?* Students should indicate that the reader can choose where they would like to start.

Students should mention the terms *glossary* and *index*. Ask students to explain what each term means. Visit each of these pages to clarify that the glossary provides meanings for new or tricky words about the topic, and the index provides the page numbers to help the reader locate particular things in the book.

Revisit the contents page. Discuss the term *introduction*. *What does this mean?* Lead students to acknowledge that an introduction will provide background information about the topic which will help us read the book.

## INTRODUCTION

### Before Reading

Ask students how many cars they have at their homes. *What do you notice first about this page?* Guide students to discuss the photo. Walk through pages 4 to 12 to build knowledge of this topic. Invite discussion of the photos and diagram.

Prompt students to notice the glossary words. Invite students to share what they know about these words and invite students to infer their meanings. Check the glossary.

*Read the first chapter and be ready to discuss what you learn. Jot down some notes to help you during the discussion.*

### After Reading

*How many cars are on the roads today?*

*What is the problem with the number of cars?*

*What fuels are used by most motorists?*

*What is meant by the term non-renewable?*

*How do fossil fuels harm the environment?*

*What gases are produced?*

*What role do fossil fuels have in contributing to the greenhouse effect?*

*What are some renewable energy sources?*

*What are car makers calling cars that do not harm the environment?*

## BATTERY ELECTRIC CAR

### Before Reading

*Read the title. Examine and discuss the photos, table, and diagrams in this chapter.*

*Read pages 13 to 17 and gather some information about battery electric cars. Be ready to point out the advantages and disadvantages of this kind of car.*

### After Reading

*Discuss what you know about electric cars.*

*What are the advantages?*

*What are the disadvantages? How far is 130 km?*

*Support students to understand this distance.*

*Why does a range of 130 km make a battery electric car not feasible for many motorists?*

*How fast can they travel?*

## SOLAR CAR

### Before Reading

*Read the title. Discuss what students already know about solar cars.*

*Walk through the photos, diagram, and map to build knowledge before reading.*

*Prompt students to notice the bold words **photovoltaic** and **semiconductor**. Discuss the possible meanings and then visit the glossary to check.*

*Read up to page 23 and be ready to discuss what you learn about solar cars. Be ready to point out the advantages and disadvantages.*

### After Reading

*What power source is used for a solar car?*

*What do you know about solar power? What does it mean to be free of emissions?*

*How does a solar car get its power? Revisit page 19 and reread. Discuss sentences in turn to clarify meaning.*

*Look at the photo of the solar car on page 20. From what we have read, why is this design required?*

*What are the advantages of a solar car?*

*What are the disadvantages of a solar car?*

*Why can't we drive solar cars today?*

## HYDROGEN FUEL CELL CAR

### Before Reading

*Read the title.* Discuss what hydrogen is. Walk through pages 24 to 27 to build knowledge of hydrogen fuel cell cars. Invite discussion and encourage students to link what they are seeing or hearing to any prior knowledge.

Prompt students to notice the bold word *electrolysis*. Discuss the possible meaning and then visit the glossary to check.

*As you read this chapter, find out about hydrogen fuel cell cars.*

### After Reading

*What is the advantage of hydrogen?*

*Where does hydrogen gas come from? What part of the fuel for this car is not from a clean source?*

*How does the hydrogen fuel cell make the car work? Revisit page 26 to clarify if needed.*

*What are the advantages of hydrogen fuel cell cars?*

*What are the disadvantages?*

## AIR CAR

### Before Reading

*Read the title.* Discuss what students can expect to read about in this chapter. *Have you heard of an air car? What would you expect it to use as its fuel source?* Walk through the photos and diagram and discuss.

*Read to page 31 and be ready to discuss what you learn. Take note of the advantages and disadvantages.*

### After Reading

*How does an air car work?*

*What do you know about this fuel source? What is compressed air?*

*What are the advantages of air cars?*

*What are the disadvantages?*

## HYBRID ELECTRIC CAR

### Before Reading

*Read the title. What can you expect to learn from this chapter? Walk through this chapter, discussing the photos, diagram, and graph. Why do you think the sales of hybrid cars have risen so significantly over the last few years? Build content knowledge before reading.*

Prompt students to notice the bold word *hybrid*. Discuss the possible meaning and then visit the glossary to check.

*Read this chapter. As you read, find out about the advantages and disadvantages of hybrid cars.*

### After Reading

*Why have hybrid cars become so popular?*

*What advantage do hybrid cars have over solar, battery electric, hydrogen, or air cars?*

*What is the financial advantage for people who own a hybrid car?*

*Why doesn't everyone own one?*

*What are the disadvantages?*

## CONCLUSION

### Before Reading

Discuss the illustration and caption before reading. *What message do you expect the author will conclude with? Read this chapter and find out.*

### After Reading

*What is the message the author leaves us with?*

*Do you have some thoughts on the sorts of cars people will be using in the future? Explain.*

*What kind of car do you hope is available when you are ready to own one? Why?*

## ▲ CODE BREAKER

Investigate the ways that adding suffixes can change the part of speech of a word. Discuss these words from the book:

- compress/compressing/compressors
- electric/electrical/electricity
- pollute/polluting/pollution

## ■ MEANING MAKER

Give students a book to help them discuss these questions with a friend.

*What do you think the problem with cars is today?*

*How are cars damaging for the environment?*

*What is the greenhouse effect?*

*What are some other reasons that we need to find different ways to power cars?*

## ◆ TEXT USER

Walk through the diagrams of the different cars in this book. Have students discuss how the diagrams help them to understand how each of the cars work.

Partner students and have them choose one diagram each. Using the diagram alone, allow students to explain to their partner how this kind of car works.

## ● TEXT CRITIC

Explain that all authors write books for a reason. The purpose may be to entertain, to inform, or to persuade. Sometimes the purpose is clear, but at other times the purpose may not be clear. Some information books may be written in such a way that the author's feelings about the topic are communicated to the reader through the writing. This is called bias. Readers need to be aware of this possibility, and the possibility that they may be influenced by the author's opinions or feelings.

*Scan through this information book and find out whether this book gives only the facts, or whether the language shows the author is trying to shape your thinking about cars in some way.*

## USING MULTIPLE INTELLIGENCES

Partner Activity

**Design:** Design a car that you would like to drive. (S)

**Build:** Build a model of this car. (S)

**Record:** Record a list of the features of your car and how your car is powered. (V)

## MULTIPLE INTELLIGENCES

The theory of multiple intelligences was developed by Howard Gardner, a professor of education at Harvard University. Howard Gardner's theory suggests that the current view of intelligence, as measured by IQ tests, is far too limited and discriminates against students who think in different ways. He proposes taking a broader perspective and has identified eight different intelligences. These are:

verbal-linguistic intelligence – word smart

logical-mathematical intelligence – number/  
reasoning smart

spatial intelligence – picture smart

bodily-kinaesthetic intelligence  
– body smart

musical intelligence – music smart

interpersonal intelligence – people smart

intrapersonal intelligence – self smart

naturalist intelligence – nature smart

Multiple intelligences have enormous potential as a tool in furthering reading and language development. Traditionally, the teaching of language and reading has focused mainly on two intelligences: logical-mathematical and verbal-linguistic. This means that many students who possess different intelligences do not receive the necessary opportunities, encouragement, instruction, or reinforcement to succeed with reading as well as they might.



# Cars! Cars! Cars!

Name \_\_\_\_\_

Graphic Organizer (before and during reading)

As you read, record the advantages and disadvantages of each kind of car.

	Advantages	Disadvantages
Battery Electric Car		
Solar Car		
Hydrogen Fuel Cell Car		
Air Car		
Hybrid Electric Car		
Fossil Fuel Car		



# Cars! Cars! Cars!

Name \_\_\_\_\_

## 🔍 Code Breaker

Write the meanings of these words, using the book and a dictionary. Think of synonyms (words with the same/similar meaning) and antonyms (words with the opposite meaning).

	Meaning	Synonyms
cheap		
clean		
worried		
damage		
disease		

	Meaning	Antonyms
renewable		
polluted		
dangerous		
future		
fast		

# Cars! Cars! Cars!

Name \_\_\_\_\_

Meaning Maker

What did you think of this book? Record your thoughts. Write your reasons for each.

Things I liked	Things I didn't like	Things I found interesting

# Cars! Cars! Cars!

Name \_\_\_\_\_

⦿ Text User

Explain how each of these cars is powered. Use the book and diagrams to help you.

<p>Electric car</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Solar car</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<p>Hydrogen car</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>Air car</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

# Cars! Cars! Cars!

Name \_\_\_\_\_

● Text Critic

This book is an exposition that highlights some issues about cars. Some information books may be written so that the author's feelings about the topic are communicated to the reader through the writing. This is called bias.

1. Do you think the author presented just the facts or did she make her own opinions known? Explain.

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2. What do you think the author thinks about the cars we use today? Give reasons.

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3. Scan through this book and look for words and phrases that show bias. Record any evidence.

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4. What did the author of this book do to help us to understand the problem?

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5. Do you think we need to look for other sorts of cars that do not need fossil fuels and that are cleaner for our environment? Explain.

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6. What do you think could happen in the future if we do not look for other types of fuel for cars?

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7. Do you think the author drives a petrol car, or one less harmful to the environment?

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# Cars! Cars! Cars!

Name \_\_\_\_\_

Exposition (Proposition/Support)

People like to read nonfiction books because they learn things. For many readers, this gives the book a purpose and helps link the book to things in their world.

What is the purpose of a book like this?

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Does it remind you of any other books or articles you have read? Explain.

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Think of two other people who would enjoy reading about this topic? Who are they and why would they find this book interesting?

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What is the most interesting information book you have read? Why?

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What made this book interesting for you?

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List the topics that you like to read about.

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