

Racing with the Sun

by Patrick Morgan

Summary

A group of engineering students takes up the challenge to build a solar-powered car. Working together, they plan, design, and build the car, then take part in a race from Chicago to Los Angeles.

Features of the Text

- Specialized vocabulary – *chassis, solar cells, carbon fiber*
- Fact boxes
- Quotes
- Timeline
- Map
- Diagrams and photographs
- Footnote

Purpose

Racing with the Sun can be used to introduce and reinforce the following skills:

- using a glossary and an index to build understanding;
- summarizing and restating information;
- reading and interpreting timelines, maps, and diagrams.

The Guided Reading Lesson

- Using a glossary and an index to build understanding
- Summarizing and restating information.

Introducing the text

Discuss the different ways that vehicles are powered.

- *What kinds of fuel do vehicles use?*
- *What other ways are there to run a vehicle?*

With the students, look at the picture on the cover of the book.

- *How does this car look different from the cars we usually see on the road?*
- *Why do you think it has been built this way?*

Read the title and contents page together.

- *What do you think “The Challenge” might be?*

Following Up

The students can:

- use the blackline master on page 27 to summarize what happened at each stage of the challenge
- write a letter to a sponsor, including a description of an imaginary project, how much money is needed and how it will be spent, and how the sponsor will benefit
- research other uses for solar power, then design a poster explaining its benefits.

Reading and discussing the text

Ask the students to read the first two pages.

- *Why do you think some of the words are in bold text?*
- *Where could you learn more about these words?*

Ask the students to turn to the glossary on page 16.

- *How have these words been ordered?*

Read the definitions for the three words in bold on pages 2 and 3.

Discuss the timeline on pages 4 and 5, then discuss the diagram on page 5.

- *Why do you think it took a year to plan and design the car?*

Ask the students to read pages 6 to 9.

- *What things did the students have to think about when they were designing their car?*
- *How did they decide what to do?*

Ask the students to read the rest of the book independently.

On the board, write the following questions for them to think about as they read:

1. What skills did the drivers need to have?
2. What is the “unexpected challenge”?
3. What is the “challenge ahead”?

When the students have finished reading, discuss the answers to these questions.

