

Teacher's Guide
Wild Wheels! Hottest Sports Cars

Introduction

This teacher's guide helps teach young adults about the world's fastest and most exotic sports cars. While reading about these magnificent and expensive dream machines students will learn about the differences in styling and performance that make these foreign beauties "the supermodels of the automobile world." Special effort has been made to include many basic mechanical systems common to all automobiles and explain their function.

National Standards

This series supports Language Arts and Science curriculum. Go to www.enslowclassroom.com and/or www.enslow.com and click on the Curriculum Correlations tab. Click on your state, grade level, and curriculum standard to display how any book in this series backs up your state's specific curriculum standard.

Classroom Activities

Activities for teaching the five curriculum areas: Reading/Language Arts; Math, Science; Social Studies; and the Arts, can be found in this teacher's guide. Readers will practice sight words and repetitive text as they learn about famous foreign sports cars and what makes them special.

Guided Reading Level: S

Reproducible for Educational Use Only

This guide is reproducible for educational use only and is not for resale, © Enslow Publishers, Inc.

Where to Find More Information about Titles in this Series:

Visit www.enslowclassroom.com and/or www.enslow.com to search for other titles and series, as well as download the teacher's guides for other titles in this series:

Titles in this series:	Library Edition ISBN:	Paperback edition ISBN:
Hottest Muscle Cars	978-0-7660-2872-2	978-0-7660-3611-6
Hottest NASCAR Machines	978-0-7660-2869-2	978-0-7660-3610-9
Hottest Sports Cars	978-0-7660-2873-9	978-0-7660-3609-3
Hottest Motorcycles	978-0-7660-2874-6	978-0-7660-3608-6
Hottest Dragsters and Funny Cars	978-0-7660-2870-8	978-0-7660-3607-9
Hottest Race Cars	978-0-7660-2871-5	978-0-7660-3606-2

Titles in this series can be purchased through all major vendors or directly from:

Enslow Classroom, an imprint of
Enslow Publishers, Inc.
40 Industrial Heights Road, Box 398
Berkeley Heights, NJ 07922-0398
Phone: 1-800-398-2504
Email: customerservice@enslow.com
Web Page: www.enslowclassroom.com and/or www.enslow.com

Wild Wheels! Teacher's Guide
For
Hottest Sports Cars

Young adults are often fascinated by sports cars. Fast and exotic, these cars have become icons and are important status symbols in popular culture. In this book, students are presented with interesting facts about cars from all over the world, including classic cars which were designed and built before they were born. The many photos and descriptive text provide plenty of food for thought. "Which car would you choose?" is a good starting point to get a discussion started.

Here is some basic information that you can share with your students about the Sports Cars featured in the book. Websites are also listed for additional information.

Sports Car Basics

Ferrari - Ferrari was founded by Enzo Ferrari in Italy in 1945. Enzo Ferrari began to sell these popular sports cars to raise money for his racing team, which was his first love. As a result, Ferraris have been among the most successful cars to race internationally on the Formula One circuit. Mr. Ferrari got his start designing cars for another famous Italian car maker, Alfa Romeo, before branching out to design cars on his own. Today, Ferrari's are among the fastest, most beautiful, and most expensive cars in the world. For more information visit www.ferrari.com/English

Lamborghini –Ferruccio Lamborghini made a fortune building and selling tractors. He was a devoted Ferrari customer until he complained to Enzo Ferrari about his car's mechanical and noise issues. Unsatisfied with Ferrari's response, Lamborghini hired away members of Ferrari's own design staff; the result was the futuristic design we know today. Lamborghini's are known for being fast, but were designed for highway driving as much as racing. They are wide and low to the ground, with characteristic "scissor" doors that open upward instead of outward. For more information visit <http://www.lamborghini.com>

BMW – BMW (which stands for Bavarian Motor Works) got its start making airplanes for the German army. After the defeat of Germany in World War I, a treaty prevented them from staying in the airplane business. Rather than closing their doors, BMW began producing motorcycles in 1923 and automobiles in 1928. Less costly and roomier than their Italian counterparts, BMW has had great success selling cars in the US. For more information visit www.bmwusa.com

Porsche – Professor Ferdinand Porsche founded the company that makes Porsche brand sports cars in 1931. He is also credited with designing the first Volkswagen Beetle. Highly successful on the racing circuit as well, Porsche boasts more wins at Le Mans racetrack than any other carmaker, with 16 wins. Ferrari, with 9 wins, is a distant second. For more information visit <http://www.porsche.com>

Jaguar – Founded in 1922 by Sir William Lyons, Jaguar Cars Ltd. is a premiere producer of British sports cars. Originally a motorcycle manufacturer called the Swallow Sidecar Company; the company changed its name to Jaguar after WWII, and developed a reputation for producing quality sedans and passenger vehicles. In 1948, Jaguar introduced the XK120, which could travel at 120 mph. This made it the fastest production car in the world. The brand is recognized today for its outstanding performance and distinctive curvy styling. For more information visit www.jaguar.com/gb/en

Sports Cars Found in this Book

p.6 Ferrari
p.14 Lamborghini
p.24 BMW
p.31 Porsche
p.39 Jaguar

Activities

The Five Curriculum Areas

SAFETY WARNING:

Before any activity make sure your students do not have any allergies to items that you might use. Never use anything that is sharp or may cut a student. Do not use anything too hot or cold that may injure a student. Always have an adult supervise all activities to ensure the safety of your students.

Reading/Language Arts activity:

Vocabulary and repetitive phrases for young adult readers are featured throughout the book. Additional vocabulary specific to this book may be found in the Glossary, beginning on page 45. As an additional exercise, ask your student to write 200 words about which sports car featured in the book was his or her favorite and why. Integrate at least one quote from the book in the assignment.

Math activity:

A maximum speed in miles per hour is given for many of the vehicles highlighted in the book. Have each student pick three vehicles from the book and make note of the maximum speed of each. Next, give a trip (i.e. New York to Los Angeles) with the distances in miles. If all vehicles are traveling at maximum speed, how long will it take each vehicle to make the trip?

Science activity:

Sports Cars are specially designed to move at high speed through the air, but moving objects are constantly fighting the forces around them. Explain that the principle of how moving objects interact with air is called "aerodynamics." The force air exerts on a car is caused "drag" and fast cars are designed to reduce drag. Students can easily visualize the difference in drag on different shapes with a simple experiment. Fill a large plastic container with water to create a small pool. Gather household or classroom items of varying shapes. Have students tie a length of fishing line to each object and drag it across the surface of the water. What shapes cut through the water most easily? Which shapes have more "drag?" Have them record their results.

Social Studies activity:

The Sports Cars featured in this book are all produced in other countries. Have each student pick a car from the book and research the country where it is made. Ask students to find the country on a map. Where is it located? What other countries does it share a border with? What kind of climate and natural resources does it have? Is the auto industry a major industry? If not, what are the major industries? Have students write a report about their findings.

Arts activity:

Car designers often create drawings of prototype or "concept cars" which are shown to the public to get feedback before putting a new car into production. Concept cars are usually futuristic or take an existing car and update it. Have each student choose a favorite automaker from the book and pretend he or she is their new designer. Using the media of your choice, (paint, colored pencil, etc.) have the student create a visual representation of his or her own concept car.

1. Match each car with the country where it is made. Draw a line.

Jaguar	Italy
Ferrari	Germany
BMW	Great Britain
Lamborghini	Germany
Porsche	Italy

2. Vocabulary – Match each word to its definition. Draw a line.

Chassis	The gas pedal
Cylinder	A “stick shift” requires the driver to use a clutch, while shifting gears by hand.
Manual Transmission	A measure of a car’s power and performance
Automatic Transmission	The “skeleton” of a car
Fastback	A car that shifts gears without a clutch.
Concept Car	Space inside an engine that contains valves, pistons, and other moving parts to supply power to the transmission
Endurance Race	A sample of a carmaker’s future design
Accelerator	A car with a sloped rear windshield to minimize wind resistance.
Horsepower	A long distance race.