



mission statement

The Henry Ford provides unique educational experiences based on authentic objects, stories and lives from America's traditions of ingenuity, resourcefulness and innovation. Our purpose is to inspire people to learn from these traditions to help shape a better future.

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overview

Amazing feats have been performed throughout the history of automobile racing: early race cars carried a rider on the running board; today, most race car drivers survive crashes and walk away. In *Physics, Technology and Engineering in Automobile Racing*, use these events to explore with your students the question *What physics concepts can be learned by analyzing automobile racing?* Automobile racing is a vivid means of introducing physics concepts, including Newton's three laws of motion, forces in straight lines and circles, motion, distance, displacement, velocity, acceleration and momentum.

This Educator DigiKit is divided into two sections: a **Teacher Guide** and a **Unit Plan**.

The Teacher Guide section includes resources to complement the *Physics, Technology and Engineering in Automobile Racing* Unit Plan. You will find a glossary, timeline, context-setting activities, bibliography, curriculum links and curriculum-supporting field trip suggestions.

The Unit Plan section follows the Teacher Guide and includes lesson plans, student handouts, answer keys, culminating project ideas, extension activities and review and assessment questions. The lessons are organized so that the students can either work in class using handouts or, if the students have access to computers, view the lessons and digitized artifacts online at TheHenryFord.org/education. If you cannot incorporate the whole unit into your schedule, use the lessons or activities most relevant to your needs.

This Educator DigiKit promotes educational use of **The Henry Ford's** extensive Transportation in America collections. We hope you and your students will find these resources engaging and relevant.

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