



Marshall Steam Museum

at Auburn Heights Preserve

Updated 10/2016

Auto Engineers: Field Trip to the Marshall Steam Museum Grade 5 & above Length 60-90 minutes

Contact Director of Education (DE) with questions at education@auburnheights.org or (302) 239-2385. Typically only two classes can visit per day. Max 50-60 kids per day; max 30 in the museum at one time.

Tour Description

Explore the development and the refinement of the automobile from 1901 to 1937 while tracing changes in engineering design and technology by learning about the Stanleys and Henry Ford. Students will watch an assembly line and explore the steps engineers take to prototype during a sail car building activity. (For this age group, consider pairing with the DE State Parks Hike on History or the Mansion Machinery Tour.)

DE Standards: H1.4-5a, H2.4-5a, H4.4-5a&b

Common Core ELA: RI5.1, RI5.3, RI5.9, SL5.1, SL5.2, SL5.4

NGSS: Engineering Design: 3-5-ETS1-1, 3-5-ETS1-2

Auto Engineers Tour of the Marshall Steam Museum Learning Objectives

After their visit to the Marshall Steam Museum, students will be able to discuss American life before and after the invention of the automobile, how different automotive technologies changed over time, and the significance of Henry Ford. During their tour, students will:

- Explore the museum's operating car collection, dating from 1901 to 1937.
- Learn how a Stanley steam car operates and why steam power was a logical choice during the early years of automobile development.
- Learn about the three different automotive technologies available at the dawn of the automotive age (steam, gas, electric) and the advantages and disadvantages of those technologies.
- Learn about the significance of Henry Ford and his Ford Model T, watch a group led assembly line activity
- Optional – build sail cars to take home.

Teacher Resources

Visit the Teacher Resources section of our website (<http://auburnheights.org/learn/teacher-resources-2/>) for free pre & post visit materials (PDFs) to go along with your program. Have an idea for something you would like to use in the classroom? Let us know and we are happy to work with you to put together free resources to meet your classroom needs.

Recommended for this group:

- **Pre-Visit Activity:** Explore the museum's online exhibit [Letting off Steam](#) complete with discussion questions to help get ready for your students' visit.
- **Motion and Design: Automobile Patents (Grades 4&5):** In this lesson, students explore what intellectual property is by examining patents. By exploring early automobile patents, students will learn what a patent includes and what can be learned about an invention from a patent in comparison to what can be learned from the actual object.
- **Multiple Perspectives: The Ford Model T (Grade 4&5):** In this lesson, students use primary and secondary sources to explore different perspectives of the Ford Model T and its impact on the automobile industry and American life.