

Holly Gerlach

Interesting Inventors: Henry Ford 200 min

Objective:

April is National Inventors Month! This is a great opportunity to showcase various inventors, study the design process, and consider the impacts of inventions in our everyday lives.

Big Idea:

Throughout this lesson, students will have the opportunity to research and celebrate Henry Ford and his invention of the automobile and how it impacted our global society.

1. Warm Up / Anticipatory 20 min

Provide students with open-ended materials to explore the movement and speed of toy cars and things to construct ramps (i.e. construction paper, snap cubes, wooden blocks, Lego bricks, books, etc.).

Pose the question to students: "How have cars changed our everyday lives?" Allow students to capture their initial thoughts (via science notebook if possible). Allow students to share their responses in partners to provide an opportunity for every child to share their answers.

Set the purpose for these series of lessons, "Over the next several days, we are going to explore and research a famous inventor and look at how we designed and created the automobile. We will also readdress our original question of 'How have cars changed our everyday lives?' so we can understand how this important invention impacts us personally."

2. Investigation and New Learning 150 min

Provide students with grade level appropriate text sets (nonfiction articles, leveled readers, trade books, online websites); students should work in small group with appropriate scaffolding and support to acquire information for the text sets. Give a purpose for reading by asking students to read and answer specific questions (both literal and interpretive questions) such as:

1. Who invented the automobile? 2. What was the inspiration for the automobile? 3. How did the inventor use the design process in his invention? 4. How did the automobile impact our daily lives? Provide at least 2 specific examples. 5. What is the most important lesson we can learn from Henry Ford? Why?

To support our young readers and writers, you can create a graphic organizer or a mini-research book with desired questions to help them read and answer their questions.

Resources

- http://wg.wonderopolis.org/uploads/users/68/313/Automobile_Research-Graphic_Organizer.pdf

3. Review & Check for Understanding 30 min

Provide the opportunities for students to be able to share their work (digitally or in-person). Students should be able to share their answers gathered from their research.

Possible ways to share: Digital Showcase (example: SeeSaw), Author Spotlight (students' research books are shared in the classroom library), Book Buddies (pair with another class to share research), etc.

Note: *This research should be explicitly modeled and supported through small group facilitation as well. It should NOT be completed in one lesson and/or day either. Provide several opportunities for students to read, gather information, and create thoughtful responses. You can also use this same shared research format to highlight other inventors and their inventions. This shared research project could also be the model to help students understand the research process- to extend this lesson sequence, you could have each student select their own inventor/invention to explore through selected text sets and research questions.

Standards: 0.2.1.1. K.1.K) 1.1. 2.1. 0.2.2.2. 0.2.4.4. 0.3.0.4. 0.2.10.10. 0.2.8.8. 3.1. 3.2. RF.K.4. SL.K.2. L.K.6. [3] SA1.1. RI.K.10. RI.K.8. 5.1. RI.K.1. RI.K.4. 0.6.1.1. 0.8.2.2. K.RV.1.1. K.RN.4.1. K.RN.3.2. K.RN.2.2. K.RV.3.2. K.SL.3.1. K.C.MC.2.1. K.S.1A.6. K.S.1A.8. K.RN.2.1. K.RN.1.1. K.RLP.4.1. K.I.3.1. 0.10.6.6. K.RIP.4.1. K.RI.MC.6.1. K.RF.1.1. K.RI.LCS.11.2. K.RI.LCS.8.1. [3] SA1.2. RI.K.2. RI.K.2 2.1.1.F. 2.1.1.D. LA 0.1.6.F. LA 0.1.6.I. LA 0.1.6.M. LA 0.4.1.A. RI.K.4 RI.K.8 SL.K.2 L.K.6 LA 0.1.6.D. W.K.1 [3] SA2.1. RI.K.10 RF.K.4 RI.K.1 LA 0.1.5.C. K.4 (B) (K.9) K.10 (A) SF1. SE1. [3] SE2.1. [3] SE3.1. LA 0.1.6.O. 110.11 (B) SG2. LA 0.1.5.B. SG3. SG1. SF2. 110.11 (C) 110.11 (F) LA 0.1.6.E. 1.I.2.1. 1.SL.3.1. 1.I.3.1. 1.RI.MC.6.1. 1.RI.LCS.8.1. SG2. [3] SA1.1. L.1.4.A. SL.1.2. RF.1.4.C. [3] SA1.2. [3] SA2.1. 1.RV.3.2. [3] SE3.1. [3] SE2.1. SE1. SF1. 1.S.1A.6. 1.W.MCC.2.1. 1.RI.LCS.11.2. 1.S.1A.8. RI.1.3 SF2. SG1. SG3. 1.RI.LCS.9.1. 1.8.2.2. LA 1.2.1.C. LA 1.4.1.A. LA 1.1.6.O. LA 1.1.6.M. LA 1.1.6.I. 2.1.1.D. 2.1.1.F. 1.8.E) 1.10.D) 1.10.F) 1.10.G) LA 1.1.6.E. 1.4 (B) 110.12 (F) LA 1.1.6.D. LA 1.1.5.C. LA 1.1.5.B. 110.12 (D) 110.12 (C) 1.6 (C) 1.14 (A) 1.14 (B) 1.19 (C) 1.8.D) 1.8.C) 1.RF.2.1. 1.RF.1.1. 1.1.1.1.2. 1.10.4.4.A. 1.RF.2.2. 1.RN.1.1. 1.RV.1.1. 1.RN.4.1. 1.RN.2.2. 1.RN.2.1. 1.8.7.7.B. 1.8.7.7.A. 1.2.2.2. 1.2.1.1. 1.1.A) 1.8.B) 1.2.4.4. 1.2.7.7. RF.1.4.A. 1.3.0.4.A. 1.2.10.10. 1.2.8.8. 1.RV.2.1. 1.2.6.6. RI.1.8 RI.1.7 RI.1.10 RF.1.4A SL.1.2 RF.1.4C RI.1.6 RI.1.2 2.1. 2.1. 3.3. W.1.7 RI.1.1 K-2-ETS1-1. L.1.4A RI.1.4 RI.1.10. RL.1.5. RI.1.2. RI.1.7. RI.1.6. RI.1.1. RI.1.4. SF1. SG1. SG2. SE1. SF2. [10] SG2.1. L.9-10.6. L.9-10.4.D. L.9-10.4.A. W.9-10.8. [10] SA1.1. [10] SA1.2. [10] SG1.1. [10] SE3.1. [10] SE1.1. SG3. RST.9-10.5. PH.3.A) 10.7.D) 10.5.H) WHST.9-10.10. WHST.9-10.9. WHST.9-10.7. WHST.9-10.6. WHST.9-10.4. 10.5.F) 10.5.E) RST.9-10.9. WHST.9-10.8. RST.9-10.4. RST.9-10.10. WHST.9-10.2.D. RI.9-10.4. 10.4.G) RST.9-10.2. 110.55.5 (B) H.P.1A.8. RST.9-10.2. E2.I.2.1. H.P.1A.6. E4.C.MC.1.1. (EI.8) EI.1 (A) E1.C.MC.1.1. E1.RI.LCS.9.5. E1.RI.MC.6.1. E1.RI.MC.5.2. E1.RI.MC.5.1. E1.RI.LCS.9.1. E1.RI.LCS.9.2. E1.RI.LCS.9.4. E1.RI.LCS.9.3. EI.11 (B) 110.31 (A) 110.55.3 (C) 110.55.4 (A) 110.55.4 (B) PH.4.B) PH.4.A) RI.9-10.1. PH.3.D) 110.55.4 (C) 110.55.4 (D) 9-10.3 (F) 9-12.3 (B) 110.31 (B) 9-10.3 (D) 9-10.3 (B) 110.55.5 (A) 10.3.F) RI.9-10.2. E2.RI.P.4.1. 110.47.2 (A) 110.47.3 (D) 110.47.4 (C) 110.47.5 (B) 110.47.1 (A) 110.46.1 (A) EIV.1 (B) EIV.1 (A) 110.34 (B) E2.RI.P.4.3. E2.RI.MC.5.1. 110.47.6 (C) 110.47.7 (A) 110.47.8 (A) 110.47.8 (B) 110.47.6 (A) 110.33 (A) E2.RI.MC.5.2. E2.RI.MC.6.1. 110.33 (B) EIV.2 (C) (EIV.8) LA 10.1.6.F. LA 10.1.6.G. LA 10.1.6.H. LA 10.1.6.I. LA 10.1.6.E. LA 10.1.5.D. 110.34 (A) LA 10.1.4.A. LA 10.1.5.C. LA 10.1.6.M. LA 10.1.6.O. 12.1.3.F. 12.1.3.G. EIV.9 (D) 12.1.2.D. 12.1.2.C. LA 10.2.1.C. LA 10.4.1.A. 12.1.2.A. 110.47.8 (D) 110.47.9 (B) EIII.1 (B) EIII.1 (A) 110.32 (B) 110.32 (A) EIII.2 (C) EIII.9 (B) 110.55.3 (B) EIII.15 (C) (V) EIII.11 (B) EII.11 (B) EII.9 (B) E2.I.3.2. 3.1. 4.1. E1.RI.P.4.3. E1.I.2.1. (EII.8) EII.2 (A) EII.1 (A) 110.55.3 (A) 110.55.2 (C) 110.48.4 (D) 110.48.4 (E) 110.48.4 (F) 110.48.5 (A) 110.48.3 (A) 110.48.2 (F) 110.47.9 (E) 110.48.1 (A) 110.48.2 (A) 110.48.5 (C) 110.48.6 (A) 110.54.3 (A) 110.54.5 (A) 110.54.5 (B) 110.53.3 (B) 110.51.2 (L) 110.48.6 (C) 110.49.2 (B) 110.51.2 (C) P.1.1. 9-10.W.1.1. E4.RI.LCS.9.1. E4.RI.LCS.9.2. E4.RI.LCS.8.1. E4.RI.MC.6.1. E4.RI.MC.5.2. E4.RI.LCS.9.3. E4.RI.LCS.9.4. L.9-10.6 E1.RI.P.4.1. E4.RI.LCS.11.2. E4.RI.LCS.9.5. E4.RI.MC.5.1. E4.RI.P.4.3. 9.13.10.10. 9.13.9.9. 9.13.5.5. 9.13.4.4. 9.14.2.2.D. E2.RI.LCS.9.4. 9.14.10.10. 9.14.9.9. 9.14.8.8. 9.14.7.7. L.9-10.4D L.9-10.4A E3.RI.P.4.1. E3.RI.P.4.3. E3.RI.MC.5.1. E3.RI.MC.5.2. E3.I.3.2. E3.I.2.1. E2.RI.LCS.9.3. E2.RI.LCS.9.2. E2.RI.LCS.9.5. E2.C.MC.1.1. E3.RI.MC.6.1. E3.RI.LCS.8.1. RI.9-10.1 RI.9-10.2 RI.9-10.4 W.9-10.8 E3.RI.LCS.11.2. E3.RI.LCS.9.5. E3.RI.LCS.9.1. E3.RI.LCS.9.2. E3.RI.LCS.9.3. E3.RI.LCS.9.4. 9.13.2.2. 9.14.4.4. WHST.9-10.4. WHST.9-10.6. E1.I.3.2. WHST.9-10.7. WHST.9-10.2(D) RST.9-10.10.