



## Busting Myths About Electric Vehicles

**Lesson Summary:** Students will use video and web based research to find out the truth about common Electric Vehicle myths. Students will role play explaining the facts about EVs with their classmates.

**Time:** 30-45 minutes

**Resources:** These web-links are good sources for understanding common myths about electric vehicles and facts to combat those myths.

<https://www.epa.gov/greenvehicles/electric-vehicle-myths>

<https://driveelectriccolorado.org/discovering-evs/ev-myths-and-myth-busters/>

<https://content.sierraclub.org/evguide/myths-vs-reality>



This video evaluates the contribution of CO2 emissions and energy consumption from fossil fuel-powered cars, electric vehicles, and hybrid vehicles. It also spotlights their entire life cycle and emissions from the value chain. Although EVs consume more energy from the production phase, they are eco-friendly in terms of usage over the life of the vehicle.

**Procedure:** Teacher will activate prior knowledge about EVs, asking students what they know about EVs. Create a chart.

Watch the video: The Best Cars for the Climate. Discuss.

**Activity:** Students work individually, with partners, or in small groups. The resources will be provided to students to use to research electric vehicle myths. Students will record their research on the worksheet titled “Busting Myths About Electric Vehicles”.

**Activity/Assessment:** Using the Quiz/Quiz/Trade structure, students will practice teaching others about common EV myths vs. facts.

- Give each student a Quiz Quiz Trade Card with the answer on the back. ...
- Students then stand up and find a partner.
- Each partner “quizzes” the other about the myth on his or her card. Students teach their partner the fact to bust the myth.
- The two students then switch Quiz Quiz Trade Cards and find a new partner.



## Standards:

- English Language Arts
  - Speaking & Listening (K-12)
    - CCSS.ELA-LITERACY.SL.7.2 Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
- Science
  - ETS1: Engineering Design
    - MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
    - HS-ETS1-1. Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
  - ESS3: Earth and Human Activity
    - HS-ESS3-4. Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.