

Sam Likes EVs

Objective

Students will become familiar with unique parts of an electric vehicle (EV) that are different from gasoline powered cars.

Curriculum Focus

Art
English Language Arts
Science

Materials

- Copies of the student sheet
- Various colored pencils, crayons or markers
- Pencil

Key Vocabulary

Battery
Charging
Electric vehicle (EV)
Motor
Outlet

Correlations

English Language Arts
K.RI.1
K.SL.1
1.RI.1
1.SL.1
2.RI.1
2.SL.1

Next Generation Science
K-LS1 - 1
K-ESS2 - 1
K-ESS3 - 3
1-PS4 - 1
3-LS3 - 2
3-LS4 - 4



Introduction

Students will be introduced to the concept of EVs and how they differ from gas powered cars. This activity is intended to provide a general overview of EVs, but it could be adapted for an older age group by discussing the various components of EVs in further detail.



Background

To learn more about electric vehicles before doing this lesson with students, view the EV video from the U.S. Environmental Protection Agency (EPA) found at youtu.be/flvnKKPERZk and a video from the U.S. Department of Energy, "Energy 101 Electric Vehicles" at energy.gov/eere/videos/energy-101-electric-vehicles.



Procedure

1. Pass out the student sheet to each student. Depending on the class, the teacher may opt to either read the short story "Sam Likes EVs" or have the students read independently.
2. After reading the short story "Sam Likes EVs," students will complete the Draw It! section.



Discussion

- What did you learn about EVs?
- What are some ways that EVs are different from gas powered cars?
- What are some of the main components of EVs?



To Know and Do More

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Student Sheet: Sam Likes EVs.

Sam is waiting for their mom to pick them up at school in their new car. It is an electric vehicle, or an EV. An EV moves using an electric motor and batteries. Charging the battery of an EV is easy. A special charging cable can plug into an electric outlet at your house. Sam sees their mom in their new EV. The EV motor is quiet so Sam can hear a bird sing in a tree. An EV is so quiet that even a bird can hear a bug it wants to eat. An EV does not smell, which helps plants and animals with the clean air they need to grow. Sam likes clean air and is happy to ride in the quiet EV. Sam hopes more people will have EVs in the future.



Draw It!

Use the backside of this paper to make your drawings or use additional pieces of paper.

1. Draw a plant or animal that likes how EVs help keep the air clean.
2. Draw yourself in an EV enjoying a quiet ride.
3. Draw the EV being charged at Sam's house.