

## WORKSHOP OVERVIEW | PLANNING AN EV ADVENTURE



### Overview:

In this activity, students will be creating a road trip they would like to go on. They then will find electric vehicle (EV) charging stations along their route. Students will need to calculate how far their electric vehicle of choice will be able to travel before needing to stop at a charging station. Students then will determine how long their trip would take including the amount of time it takes their electric vehicle to charge along with how much it will cost to charge their car along the way.

**Activity Duration:** 45-60 minutes

### ESSENTIAL QUESTIONS

- *Do you think it is more or less expensive to take a road trip in an electric vehicle versus a gas powered car?*
- *What are the environmental benefits of taking a road trip in an electric vehicle?*

### MATERIALS NEEDED

- *Google Maps*
- *Computer*
- *Pencil*
- *Scrap paper*

### INSTRUCTIONS



1. Choose a battery powered electric vehicle that you would want to drive on your road trip. Once selected, determine its range (how many miles it can travel on a full charge).
2. Pick a destination for your road trip and a 3-5 stops you would like to make along the way (examples include hotels, restaurants, theme parks, museums, etc.).
3. While mapping your road trip, find charging stations along the way that you could stop at. Try to find charging stations that are only a few miles off of the main route if possible!
4. Determine how many miles you will be traveling and how often you will need to stop to charge your car. Mark the places you will stop to charge on your map and figure out how long you will need to wait at the charging station to fully charge the battery. Then, figure out how much it will cost to fully charge your car at the location you have selected.
5. Once you have mapped out your route, determined which charging stations you'll stop at, how long it will take to charge, and how much it will cost, create a visual that includes the following:
  - a. A picture of your map with mapped out destinations, stops, and charging stations
  - b. The amount it will cost to charge your car on your trip
  - c. How long it will take to travel and charge your car