## Skill challenge option 1: Cartographer and navigator

A cartographer is a person that makes maps. A navigator is a person who figures out how to get from place to place. In this project, you need to be both!

#### What to do

The first thing to do in this project is to make a big map. You will use this map with your Edison robot, so it needs to be big enough to allow Edison to drive around on the map.

Decide what place your map will be about. Your map could be of your school, your town, a fictional city or a real place in the world where you want to travel. Whatever you choose, you will need to plan out your map and then make a version big enough for Edison robots to drive on.

You also need to create programming challenges to be solved using your map. These challenges should tell the programmer where to start the Edison robot, where the programmer needs to have the robot finish, and any rules for the program. For example, you could have a challenge that says: Start at the school. End at the ice cream shop. Don't go past the park.



### Hint

Your program rules don't have to be just about where to go and where to avoid. You can also make rules about how Edison travels, such as going backwards or the speed Edison moves. Program rules that require the programmer to use blocks from the LEDs and Sound categories are good too!

Test the programming challenges to make sure a solution is possible for each one. Then trade challenges with a partner or another team. How many challenges can you solve?



# Skill challenge option 2: Writer and director

Edison cannot speak, but that doesn't mean you cannot use the robot to help tell a story! In this project, you need to write a story, then 'direct' Edison to help tell the tale as if the robot were an actor in a play.

### What to do

Write a story using a story map. Have Edison help you present this story. You will 'direct' Edison by programming the robot.



### Hint!

There are lots of ways you can do this project. You could make a story map that is big enough for Edison to drive on, performing actions at each stop on the story map. Or you could have Edison perform actions in time with you as you read the story out loud. Or maybe you can even turn this into a movie by filming Edison performing!

You can use any of Edison's outputs to help tell the story. Choose blocks from the Drive, LEDs and Sound categories. Don't forget about wait blocks! You can use wait blocks to help control the timing of Edison's actions!

Create a program for the robot to follow along and help make the story exciting by doing something at each major point in the story.

