



## Materials

- Google Science Journal App
- iPad or iPhone, Android device or Chromebook
- Google Classroom

## Standards

### NGSS

- Cause and effect relationships are routinely identified, tested, and used to explain change. (4-ESS3-1), (4-ESS3-2)
- Over time, people's needs and wants change, as do their demands for new and improved technologies. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment. (4-ESS3-1)
- Engineers improve existing technologies or develop new ones to increase their benefits, to decrease known risks, and to meet societal demands. (4-ESS3-2)

## Procedure

1. Students will investigate their nearby surroundings, either their school facility or neighborhood to observe how humans have had an impact on the setting and record observations. Students will use a measure taken in doors as the control.
2. The teacher can assign students to investigate one variable or multiple variables. A good place to start would be with the decibel level.
3. Students will use the Science Journal app on their device as a data collection tool to measure a variable related to human impacts on the environment.
4. Students will share their findings with their teacher through a Google Classroom assignment and/or discuss their findings in a discussion in class, on Google Classroom or on Google Meet.



### Extension Activity

- To have a more formal presentation, students could create a Slides presentation discussing how they conducted their experiment and their findings.