



Y-CITYSCI: A Youth-Led Citizen Science Network for Community Environmental Assessment
Introduction to Nature of Science and Citizen Science: Lesson 4
Grade Level: Middle school
Duration: 1 hour

Introduction to Citizen Science

Next Generation Science Standards

Disciplinary Core Ideas:

PS4.C Information technologies and instrumentation

ESS3.C Human impacts on Earth systems

Science and Engineering Practice 3: Planning and Carrying Out Investigations

Objectives

- 1) Students will define what citizen science is.
- 2) Students will use a citizen science app to collect data.

Materials

- Computers/tablets (1 per pair of students)
- iNaturalist website or app: <https://www.inaturalist.org/>

Activities

Bellringer: Introduce an example of a citizen science project, such as the iNaturalist website, its purpose, and how the public interacts with it. (5 minutes)

Lecture: Discuss what citizen science is, the purpose, and how it is relevant to the students. (10 minutes)

Activity: Break students into pairs with computers or tablets. Go over how to properly use the iNaturalist app. Take students outside to practice taking pictures of plants and animals and adding them to the class iNaturalist account. *You can make one program account ahead of time to share and monitor.* (30 minutes)





Discussion: Return to the classroom and discuss what students like and dislike about iNaturalist. What would they do differently or keep the same if they made their own environmental science focused app? Have the students take a few minutes to write down ideas of a citizen science app that they would be interested in using and collecting data for. (15 minutes)

Resources

Key Term:

Citizen science - the participation of the general public in scientific research.

The *Getting Started* page of the iNaturalist website is a guide to the main features of the site:

<https://www.inaturalist.org/pages/getting+started>