

San Francisco Children & Nature

Youth and Nature Lesson Plan



LESSON SUMMARY

This lesson introduces the [2019 Youth Nature Survey results](#) to the students who participated in the surveys and their peers. The lesson aims to explore the findings of how current San Francisco youth access and connect with nature through an outdoor reflection activity.

Specifically, this lesson will guide students in a reflection of the role nature plays in their overall health and wellness. Upon reflection, the lesson informs students of the San Francisco Outdoor Bill of Rights and allows for student investigation around opportunities to continue connecting to nature.

GRADE LEVEL: 6-12

TIME

40-60 minutes

LEARNING OBJECTIVES:

In this lesson, students will:

- Explore their connection to nature
- Become an observer of a local natural space
- Understand the San Francisco's Outdoor Bill of Rights

NGSS STANDARDS

- Cross-cutting Concept: *Patterns*
- *MS-LS1-1: Structure, Function, and Information Processing*
 - Cross-cutting concept: *Systems & Systems Models*

For extension activity #1:

- HS-ETS 1-2.: Engineering Design
- HS-ETS1-3: Engineering Design

MATERIALS

- [Youth & Nature Survey Infographic](#)
- [San Francisco Outdoor Bill of Rights](#)
- [Nature in the City Maps](#)

Optional materials, depending on facilitation

- Whiteboard or scrap paper
- Dry erase markers or any writing utensils
- Hula hoops for "exploration zones"

PREPARATION

- **Safety:** Before leading the outdoor activity, you should visit your site and scan for any potential hazards (dangerous trash, gopher holes, poison oak). Public spaces are used by many people in different ways, so you should tell students not to reach into ground cover (ivy, bushes, etc.) without first seeing what they are grabbing.
- Take into account how long it will take for group to transition to/from outdoor space when planning timing flow

VOCABULARY

- Nature
- Social Justice
- Environmental Justice

PRE-ACTIVITY		
TIME	INSTRUCTOR	STUDENTS
15 MIN	Instruct students with the adjacent prompt. Pick a couple of these pre-activity discussion questions to begin the lesson: • What is nature to you? • Where do you see nature in your own life? • How were you introduced to nature? • When you think of nature, what memories are most impactful? • What is your friends' or families' relationship to nature? This one will be last question asked and explored as a large group • What are some reasons you don't go out in nature?	1) "Stand up and find a "shoe partner". That means someone who has similar shoes as you. When you find that person, stand back to back." 2) When all students in class have found a group, say: when I say go – I want you to turn around and discuss with this partner this question: [insert one question from left side] 3 & 4) Depending on if you have a low energy group, continue having students find pairs (use: similar accessories, similar height, someone they usually don't talk to, etc) OR, if you have a high energy group... have a full pair find another full pair (leading to groups of 4, then groups of 8, etc) and have them continue to discuss with their small groups 5) Bring whole group together (ex: back to sitting at desks or sitting in circle), and ask for share outs for any themes people heard that were similar 6) Ask the whole group and chart answers on the final question of, "What are some reasons you don't go out in nature?"

ACTIVITY		
TIME	INSTRUCTOR	STUDENTS
25 MIN (ACTIVITY)	I Notice, I Wonder, It Reminds Me Of (an activity developed by BEETLES at the Lawrence Hall of Science) Boundaries: • For your 10-minute exploration, boundaries are key. Some sites might be small enough that you use the whole space, but for larger areas, you can use natural markers (ex. stay on this side of the tree). If you have access to hula hoops, those can be used to create "exploration zones" that each group uses to frame their area of interest.	1) Introductory question: Where do you see nature around us right now? 2) Share with a partner for 30 seconds. Bring group focus back and ask for a few volunteers to share what makes them think of nature in the park/outdoor space. 3) In this activity, we will be making our own observations about the nature around us to see if we can understand it more deeply. Explain that curiosity and observation are muscles that we can strengthen through practice. 4) Invite everyone to pick up the nearest nature they see (leaves, rocks, sticks) and come back to the circle.

5) (1 min.) “I notice”: Begin sharing observations out loud with a partner--each person should closely examine their object and note everything that they observe, beginning by saying “I notice...”

6) (1 min.) “I wonder”: Now, with the same partner, take turns asking questions about your objects using the phrase “I wonder...”

7) (1 min.) “It reminds me of”: The last phase of our exploration involves making connections--with your partner, now take turns sharing all of the things that your object reminds you of.

8) (10 min.) We will now use these statements to explore further--in groups of 2-3, spread out and find new natural objects to observe. When you find something interesting as a group, begin by taking turns sharing your observations and questions out loud.

9) After around 10 minutes, depending on group energy, you can bring your students back together and have groups share out things that they noticed or found interesting.

10) Closing question: Ask students if they were surprised by anything that they found interesting? Did this activity change how they think of nature?

DEBRIEF		
TIME	INSTRUCTOR	STUDENTS
20 MIN	Ask students to share out their reflection ideas with the following prompt: - How did this experience out in nature feel? Share the infographic here and have students analyze: - What part of the survey do you connect most to? Share San Francisco Children’s Outdoor Bill of Rights and reflect with the following questions: - What are some ways you’d like to continue to engage with nature? - Has your idea of nature changed after this activity?	

EXTENSION IDEAS

Map Design and Urban Plan Activity:

Lead students in a map and design exercise. If you could design or re-imagine a San Francisco park, what would you want it to look like?

Show two maps; one with development/gentrification statistics. How have you experienced social and environmental justice when you are interacting with nature?

- a. <https://www.urbandisplacement.org/map/sf> (UC Berkeley map of displacement in the Bay Area)