

DURATION:

45 minutes

GRADE:

8
9
10
11
12

KEYWORDS:

Ecosystem
Biome
Diversity
Sustainability
Interactions
Population Dynamics
Change
Frequency
Amplitude

CURRICULUM**LINKS BY GRADE:**

Career Education (all grades)
Applied Design,
Skills and Technology
ADST 8/9 (media arts)
Media Design 10
Social Studies 9
(cause and consequence)
Social Studies 10
(environmental policies,
cause and consequence)

**CURRICULAR
COMPETENCIES:**

Processing and
Analyzing; Evaluating
Social Responsibility
Questioning and Predicting
Applying and Innovating
Communicating

GLOBAL SOUNDSCAPES: MISSION TO RECORD THE EARTH TAKES STUDENTS ON AN EAR-OPENING JOURNEY INTO THE SCIENCE OF SOUND AND THE EXCITING NEW FIELD OF SOUNDSCAPE ECOLOGY.

WHAT WILL HAPPEN IN GLOBAL SOUNDSCAPES?

During this interactive session, our facilitators will use a combination of live and video presentations to teach students how scientists use sounds to study the diversity and health of ecosystems around the world. Students will learn how to analyze sounds visually, compare soundscapes across different times and locations, and discover the variety of ways that sound is used by human cultures around the world. Students will be introduced to the emerging STEM field of Soundscape Ecology and the many types of science careers involved, from field work to computer analysis.

CLASSROOM ACTIVITY: SOUND MAPS

Sketching songs, sirens and other sounds, students will sharpen their observations and interpretations of the environment around them. A sound map helps us become more aware of the sounds in our environment. It's a fun way to record observations and compare our environments.

WHAT YOU NEED:

- » Paper and drawing materials
- » Indoor or outdoor space

WHAT TO DO:

1. Take students outdoors and ask them to spread out.
2. Have each student mark an X in the middle of their paper to indicate where they're sitting.
3. Set a timer for five minutes. During this time, there's to be no talking.
4. Ask students to record the sounds they hear around them by drawing or describing, on their paper, what and where the sounds are coming from.
5. If time, move students to a second location and repeat the activity.
6. Have students sort their entries by source on their "maps" in the following categories: *geophony* (sound from the earth/water/weather), *biophony* (sound from non-human animal life), and *anthrophony* (sound from humans and human-made objects). Which category contains the most sounds? How do the two locations compare?

MORE ABOUT ECOLOGY AT TELUS WORLD OF SCIENCE

Search: Sara Stern Gallery: Live animals, Beaver Lodge.

Ken Spencer Science Park: Chicken Coop, Natural Pond Ecosystem.

RECOMMENDED RESOURCES:

- » "Record the Earth," citizen science portal ilisten.org/