Human Impacts, Benefits & Solutions

NEW YORK STATE Environmental Conservation

Topics: Community, diversity, environmental resources, pollution

GRADE LEVEL: K-2

Big Ideas:

- Communities form when people work together for a common purpose.
- Not all communities are the same.
- Humans use natural resources for everything they do.
- Pollution is made by humans.

Learning Objectives: students will be able to...

- Distinguish between a community and a group.
- Identify what makes their classroom a community.
- Communicate solutions that reduce their impact on the environment.

New Your State Science Learning Standards:

K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Key Understandings:

- Communities form when people work together for a common purpose.
- Things that people do can affect the world around them.
- People can make choices that reduce their impacts on the land, water, air, and other living things.

Essential Questions:

- What is a community?
- How can communities work together for the common good?
- What is pollution?
- What are some choices that people can make to reduce their impacts on the environment?

Students will know...

- Key vocabulary terms.
- What makes up a community.
- Not all communities are the same.
- Pollution comes in different forms and from many sources.

Vocabulary:

- Community: a group of people who live in the same area (such as a city, town, or neighborhood).
- Diversity: the quality or state of having many different forms, types, and ideas.
- Natural resource: materials or substances that exist in nature such as air, sunlight, water, soil, stone, plants, animals, and fossil fuels.
- Neighborhood: a geographically localized community within a larger city, town, suburb or rural area.
- Pollution: harmful materials into the environment.
- Rural: any population, housing, or territory not in an urban area.

- Suburban: an outlying part of a city or town.
- Urban: living, located, or taking place in a city.

Learning Plan: We recommend doing these lessons in sequential order; however, they can be done as individual lessons. Lessons have multiple links (videos, songs, diagrams, activities) that can be used at the teacher's discretion depending on class time.

Pre-assess: What is a community? What makes up a community? Use K-W-L to assess students' prior knowledge, have students write or draw in response to the essential questions.

Progress Monitoring: Formative assessment and teacher feedback should be ongoing throughout the lessons. Teachers should develop assessments based on their individual class needs. Think-pair share, exit tickets, interactive discussions, questions and listening, informal observations, quizzes and student work samples can all be used.

Lesson 1: What is a Community? Students watch a story video, then explore the characteristics of their own community.

- What is a Community <u>Student Activity</u>
- Video: Humphrey the Lost Whale a True Story
- Extension: Inclusive Communities

Lesson 2: Exploring the Three Types of Community- Students watch a video, then identify and compare rural, urban, and suburban communities.

- Exploring the Three Types of Community <u>Student Activity</u> & <u>Communities Worksheet</u>
- Video: Three Communities

Lesson 3: Sense of Community in the Classroom- Students explore identity through community-building activities.

- Identity Circle Student Activity
- Classroom Community Bingo Game

Lesson 4: Pollution- Students watch a video, then learn how pollution gets into the environment and what they can do to prevent it.

- Video: Pollution- Science for Kids
- Playing Hide and Seek...With Pollution Student Activity
- When You Use Water, You Use Everything In It Student STEM Activity

Lesson 5: Exploring Natural Resources- Students learn what is natural and what is man made through a series of activities, crafts, and videos.

- Natural vs. Man Made Student Activity
- Exploring Natural Resources and Products Student Activity
- Video: Reduce, Reuse and Recycle, to Enjoy a Better Life
- Video Song: <u>Reduce</u>, <u>Reuse</u>, <u>Recycle</u>
- Science Crafts: Milk Box Boats, Recycled Magazine Mosaic, Soda Bottle Fish

Teachers: Would you like to visit us at Norrie Point environmental education center, or have an educator visit your classroom in-person or virtually? Contact us to schedule a program: hrteach@dec.ny.gov

Resources:

Children's books:

- The Wump World by Bill Peet
- The Magic School Bus Gets Cleaned Up by Scholastic
- We are Water Protectors by Carole Lindstrom
- The Water Princess by Susan Verde
- One Plastic Bag by Miranda Paul
- The Lorax by Dr. Seuss
- What a Waste by Jess French
- Counting on Community by Innosanto Nagara
- Look Where We Live! By Scot Ritchie
- Quinito's Neighborhood by Ina Cumpiano
- Maybe Something Beautiful by Isabel Campoy
- Whose Hands are These? by Miranda Paul
- All Are Welcome by Alexandra Penfold
- One Earth by Eileen Spinelli
- 10 Things I Can Do to Help My World by Melanie Walsh

Websites:

- Children's Environmental Literacy Foundation
- Learning for Justice
- Learning to Give
- Brooklyn Bridge Park
- NYSDEC
- Teach Hub