



## Sustainability: The Human Factor Video Topic Series

### ABOUT THE VIDEO TOPIC SERIES

This three-part video series captures the humanity, dedication, and ingenuity students are demonstrating to find sustainability solutions that lead to thriving communities. “Sustainability: The Human Factor” reflects an engaging and inclusive view of sustainability by highlighting young changemakers in diverse communities. These videos show how students are tackling three key challenges—the importance of native plants, environmental risk factors to health, and food waste—and are enhanced with insight from the real-world innovators at Trane Technologies, a global climate solution company.

### USING THE VIDEOS IN YOUR CLASSROOM

The videos in this three-part topic series can be used in a variety of ways, depending on the needs of your students and device access. They were designed with flexibility in mind and can be used in any order, by choosing only one, or by using all three!

**Watch and Discuss:** Watch one or more of the videos as a whole group or assign to students to watch independently. We recommend watching together as a class, as it creates the foundation for more engaging discussion.

**Classroom Activities:** Each video has an accompanying classroom activity aligned to national standards designed to be completed in approximately 45 minutes. The video is an integral part of each activity, which also includes objectives, standards, student resources, and detailed implementation strategies. Instruction is divided into the following sections:

- Engage: An opening discussion that captures students’ interest in each topic
- Learn: Presentation of content that connects directly to national standards
- Challenge & Apply: Application of student learning in a collaborative and research-based activity
- Reflect: A short written reflection on the activity’s Essential Question

## **FAMILY CONNECTIONS**

To deepen this learning, each classroom activity features a companion Family Connection to help students bring their classroom conversations home to engage families in making more sustainable choices together. Each Family Connection includes discussion questions, an activation, and a key takeaway about the topic. These resources are directly connected to the classroom activities and are intended to be general, so that all families can be engaged no matter the level of background knowledge.

## Lesson 1 | Native Plants

[View Classroom Activity](#)

[View Family Connection](#)

### OBJECTIVES

Students will:

- Learn about the importance of native plants to a healthy ecosystem.
- Research plants native to their area.
- Discuss ways that individuals and communities can improve local ecosystems.

### OVERVIEW

After learning about the importance of native plants to the success of an ecosystem, students will research plants native to their communities. They will compose plans that include their ideas for how they can personally increase native plant growth and suggestions for how their town or city can improve the ecosystem on a larger scale.

#### Essential Question:

- What role do native plants play in a healthy ecosystem?

#### Family Connection:

Families are encouraged to plant a green space, regardless of where they live, that will include native or air purifying plants.

## Lesson 2 | Can Air Make You Sick?

[View Classroom Activity](#)

[View Family Connection](#)

### OBJECTIVES

Students will:

- Learn about the relationship between asbestos and health concerns like mesothelioma and explore genetic risk factors that might exist.
- Analyze data and draw conclusions.
- Make inferences about the health risks of asbestos.

### OVERVIEW

Students will analyze data about the prevalence of serious illness in a town with substantial amounts of asbestos. They will also explore genetic risk factors that might exist. Students will use statistical evidence to make an inference about the health risks of asbestos and consider the ways that environmental factors, like the air we breathe, can impact health outcomes.

#### Essential Question:

- How does your environment impact your health?

#### Family Connection:

Families are encouraged to investigate environmental factors in places they live, work, and learn that impact their health.

## Lesson 3 | Reducing Food Waste at Home

[View Classroom Activity](#)[View Family Connection](#)

### OBJECTIVES

Students will:

- Learn what composting is and how it reduces food waste.
- Research different methods for home composting.
- Discuss benefits and tradeoffs of different compost systems.

### OVERVIEW

After learning about what composting is, students will work in groups to explore various methods for home composting. They will construct 3-2-1 presentations to teach their peers about their assigned composting technique and draw conclusions about which method(s) is most plausible for their area/situation.

#### Essential Question:

- Can composting at home reduce food waste?

#### Family Connection:

Families are encouraged to begin small with composting in an effort to reduce their home's food waste.