

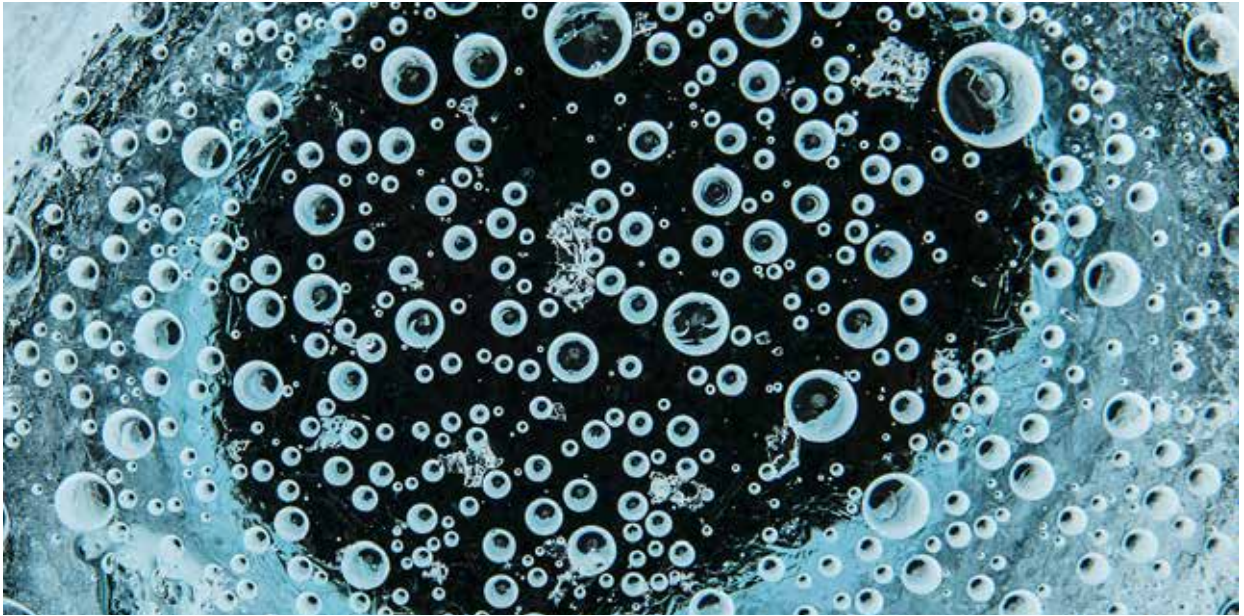
# THE HUMAN ELEMENT

---



“ I realized that there was a complex story going on in the world about the collision between people and nature. And I felt a great sense of urgency to bear witness to that.”

—James Balog, *The Human Element*



This lesson is for educators who have the opportunity to show the full film of *The Human Element*. It can be used as a stand-alone lesson, or as an introduction to the series of four separate lessons on each of the elements: Earth, Air, Water and Fire.

## LESSON OBJECTIVES

***At the end of this lesson, students will be able to:***

- ▶ Articulate the concept of the Anthropocene era, i.e. how human behaviors relate to our current era of climate change.
- ▶ Explain how human interactions have caused changes to each of the four “classical” elements in nature, and point to how human actions may work to lessen or ameliorate those changes.
- ▶ Create an artistic expression that either describes how human behavior is related to climate change, the effects of those changes, or the ways humans can help.

## MATERIALS

- ▶ You can access the full film here: <https://vimeo.com/328529547>. The password is: **THEedu**.
- ▶ Projection equipment to screen *The Human Element*
- ▶ Printed copies of [Handout One—Pre-Screening Writing Prompts](#) and [Handout Two—Full Film Note Catcher](#)
- ▶ Student access to the internet or copies of [Research Appendices One-Three](#)

## DURATION (~ TWO HOURS)

5 minutes for pre-screening exercise  
 77 minutes to screen film  
 30 minutes for post-screening discussion/exercise

## OPENING EXERCISE

**Read this quote aloud to the class:**

“ For thousands of years, many people believed that nature was made up of four elemental forces: earth, air, water, and fire. But I’ve come to realize there’s a fifth element: people. We are a force of nature, too. People are changing the other elements. At the same time, those elements are changing us. And what I want to do is bring this story to life.”

—James Balog, *The Human Element*

**Offer students 3-5 minutes to choose and respond to one of the following writing prompts or sentence fragments. See [Handout One—Pre-Screening Writing Prompts](#) for a printable handout.**

- ▶ Through tools and technology, humans can control the elemental forces of the earth.
- ▶ Humans are part of Earth’s natural system, so our actions are part of Earth’s natural system.
- ▶ Humans’ relationship to the earth is...
- ▶ Humans’ role in caring for and preserving the earth is...

**Watch the film (77 minutes)**

Use [Handout Two—Full Film Note Catcher](#) to encourage students to take notes while they are watching the film. Read through the handout together prior to the screening so students know what to watch for in the film.

EARTH

AIR

FIRE

WATER

## POST-SCREENING QUESTIONS

*As a class, debrief the film using the questions below as a guide:*

- ▶ What moments, words or images stood out to you in the film, and why?
- ▶ Look back on what you wrote in response to the prompts or the sentence fragments before the film. Is there anything in the film that changed or influenced what you wrote?
- ▶ The film illustrates how human behavior influences climate change, and how climate change is impacting humans. Discuss examples you saw of each.
- ▶ In what ways are each of the elements in the film connected to one another? How do they influence each other – and, ultimately, how does their combined force influence humans?
- ▶ Talk about people or voices in the film you notice whose ideas could help slow or reverse climate change.
- ▶ By adding human activities and effects to the science of climate change, **The Human Element** extends the conversation from hard sciences into history, philosophy, sociology, economics and more. Why do you think expanding the conversation in this way matters? How does adding in those considerations affect your understanding of climate change?
- ▶ In the film, James Balog says, “In Earth Science they talk about nature’s tectonics. Those are the forces that are cracking the planet’s crust with earthquakes and building volcanoes. I’ve come to think of our influence on the earth as Human Tectonics. Many scientists now call this period of time the **Anthropocene**. The combined impact of our population, our technology, and our desire for more and more material goods has reshaped the earth as we know it.” As a large group, decide on a definition for “Anthropocene,” and what it means to name a new geologic age.

*Ask students to call out some of their notes from the film about how humans change each element, and the effects those changes have on humans in turn. Record their answers on a flipchart or whiteboard. Once the class has completed these lists, brainstorm together how each of the elements are connected: how does change in one element affect the other elements?*



EARTH

AIR

FIRE

WATER

## EFFECTS: VISUAL EVIDENCE

**Briefly discuss the group's answer to the following questions:**

1. Think or look back at your note catcher and choose an image from the film that stood out to you. Talk about why that image impacted you.
2. What might you do to create further visual evidence that addresses or adds to any of the environmental changes portrayed in the film?
3. How would you use that visual evidence to inspire change or action?

**Ask students to choose one of the causes or effects they named in their note catcher or from the whiteboard activity above. Create an image, write a poem, or write a short reflection on what that change or effect means to them, and/or what might be done to address it.**

**Share these images and expressions as a class. Consider conducting a "gallery walk," where students post their works on the wall and walk around.**

## EXTENDED LEARNING OPPORTUNITY: MEDIA LITERACY

**Ask students to research and write answers to the following questions:**

- ▶ What do you believe the filmmaker's perspective is on climate change? What signals or clues help you understand their opinion?
- ▶ Were there any words, images or ideas in the film that you are concerned are not true? How might you verify them?
- ▶ What ideas or voices about climate change were not featured in the film? Why do you think they are missing?
- ▶ Find sources online or in a library that either corroborate or complicate the conclusions in the film. Explain how you found them, and why they are trustworthy.



## SOLUTIONS MOVING FORWARD

*The Human Element* reveals that stories are an essential way to understand humanity's role in our changing planet. While there are many resources outside the scope of these lesson plans that educators can use to communicate climate action plans, below are a few tips you can discuss with or distribute to your students to get started.

\*Note: This list is also included in the *Culminating Lesson*.

### 1 Seek the truth about climate change.

- ▶ There are many forces in the world obscuring what's happening with our changing climate, but the scientific facts are clear: Earth is changing, and humans are contributing to these changes.
- ▶ Use *The Human Element* film and the [Climate Protection](#) section of the website as a starting—but not ending—place for your own independent research on the myriad factors influencing climate change. Think critically about your sources, and never stop gathering data.

### 2 Use your voice to spread awareness of the evidence.

- ▶ Prepare for educated conversations about climate change with friends, family members, classmates, teachers, and skeptics. You can find a great resource on how to talk to people about climate change from [The Nature Conservancy](#) as well as in the below resources also listed in the Educator Introduction:
  - [This short video](#) from “Our Climate Our Future” challenges viewers to learn something from every conversation by focusing on listening. The main message is that an argument based on facts and figures rarely changes minds, whereas a conversation based on mutual respect and listening might facilitate learning.
  - For data and statistics that directly address the most common myths about climate change, explore this article from [Conservation International](#).
- ▶ Use the resources from Earth Vision Institute's [Getting the Picture](#) curriculum “Climate & You” chapter. In the Speaking Up for Our Earth section (6.1), there are samples of videos and projects made by young people around the country. For example, in videos produced by Lynne Cherry for her book [Young Voices for the Planet](#), young people share stories about actions they are taking in their homes, communities, schools, and across the globe to fight climate change. Here are two examples:
  - Alex Loorz, of Ventura, CA, was inspired at age 12 by Al Gore's film *An Inconvenient Truth*. He created a similar presentation specific to the effects of climate change in his hometown and sparked community-wide efforts to combat it, such as a student commitment to be free from fossil fuels, and permanent, 10-foot posts placed on the beach to recommend actions people can take to prevent further sea level rise.



- Olivia Bouler was 11 when the 2010 BP oil spill happened near her home in coastal Louisiana. A bird lover and artist, she wrote to the Audubon Society to offer her art to elicit donations to rescue the nesting brown pelicans affected by the spill. Her artwork raised \$200,000 and was seen by millions of people around the world. She traveled to Washington, DC to lobby her state representatives and even the U.S. Secretary of the Interior on behalf of renewable energies.

- ▶ Research other examples of global youth involvement in climate change action below:
  - [UN Climate Change](#) features youth-focused global video contests, conferences and actions.
  - Review this *New York Times* [photo gallery](#) from the March 15, 2019 Global Youth Climate Strike to see how young people around the world used their voices to demand policy change. Sign your class up for the [NY Times Climate Forward](#) newsletter for climate news updates.
- ▶ Work on behalf of political candidates proposing climate solutions. Even if you can't vote, you can volunteer on political campaigns, share the art, photos and other visual evidence you created for these lessons with local leaders and politicians, and tell others why you support their positions.
- ▶ Get involved with grassroots advocacy organizations such as [Citizens' Climate Lobby](#), a nonpartisan non-profit focused on national policies to address climate change.

### 3 Change your choices.

- ▶ Research your own carbon footprint, which is the amount of carbon dioxide your personal energy use releases into the atmosphere. Visit [Getting the Picture](#) for resources on the environmental effects of air travel, single-use plastics, and other major sources of carbon dioxide pollution. Measure your own carbon footprint at home with your family using one of these carbon calculators:
  - [From the EPA](#)
  - [From The Nature Conservancy](#)
- ▶ Learn how your daily choices can reduce your carbon footprint.
  - Ask your parents where your home's electricity comes from. Inform them that, in many places, you can easily change your home's power source from fossil fuels to renewables like wind or solar while remaining on your city's standard power grid. You can research this as a family here: U.S. Department of Energy—[Energy Efficiency in Your Home](#).
  - At school, conduct a school energy audit. Here is a [comprehensive guide](#) to review.
  - Choose one or more of the "25 Tips to Reduce Your Carbon Footprint" featured in [Carbon Offsets to Alleviate Poverty](#) to implement as a class and track your progress.
  - Support local companies that have sustainable energy practices like solar panels, recycling and composting bins.

4

**Create a new story for your world.**

- ▶ Dream big about how to change people’s reliance on fossil fuels and other factors contributing to climate change. From innovative businesses to zero waste lifestyles, remember: you can be the change you wish to see in the world.
- ▶ Embrace and practice [climate optimism](#) and remain steadfast in individual and community efforts that are changing practices and policies. Watch Professor Katharine Hayhoe’s [TED Talk](#).



# HANDOUT ONE

## PRE-SCREENING WRITING PROMPTS

*Choose one or two of the below writing prompts or sentence fragments that interest you, and take 3-5 minutes to write down your thoughts in response.*

I believe that humans, through tools and technology, can control the elemental forces of the earth.

---

---

---

---

I believe that humans are part of Earth's natural system, so our actions are part of Earth's natural system.

---

---

---

---

Humans' relationship to the earth is...

---

---

---

---

Humans' role in caring for and preserving the earth is...

---

---

---

---



## HANDOUT TWO

### FULL FILM CHAPTER NOTE CATCHER

---

As you watch *The Human Element*, write down words or phrases that are new and/or interesting to you:

---

---

---

Watch for images that affect you. Briefly describe the image and a word or two about your immediate response to it.

---

---

---

---

During each “chapter” of the film, write down what you hear about how humans are changing this element, and how that change is in turn affecting humans.

**Water:**

---

---

---

**Air:**

---

---

---

**Fire:**

---

---

---

**Earth:**

---

---

---

