



## Special Learning Journey: *Introduction to Planetary Health*

In this curriculum of 4 footsteps, students explore the topic of planetary health, which has to do with the complex connections between environmental changes and human health.

<b>Footstep 1:</b> <i>Walking with Health in Mind</i>	Students take a slow walk in their own neighborhoods, noticing things that may have an impact on their own health, the health of people in their community, and/or the health of the environment.
<b>Footstep 2:</b> <i>Uncovering the Big Idea of Planetary Health</i>	Students read and view resources related to planetary health. Then, they draw on their work from Footstep 1 to choose one human health impact and one environmental change, and make a concept web connecting the two.
<b>Footstep 3:</b> <i>Zooming in, Reporting out</i>	Students identify an issue or topic related to planetary health that particularly interests them, then investigate it and share their findings.
<b>Footstep 4:</b> <i>Exploring What We Can Do</i>	Students identify a few choice-points in their everyday routines where they make choices that might impact planetary health. Then, they select one choice-point and consider alternative choices that would be healthier for their communities and the planet. Finally, they create a resource that informs others about the issue and persuades them to adopt similar changes.

*This iteration of Out of Eden Learn [Introduction to Planetary Health](#) was published in February 2021.*

## **Introduction to Planetary Health**

### **FOOTSTEP 1: WALKING WITH HEALTH IN MIND**

#### **GET INSPIRED**

Welcome to Out of Eden Learn's Planetary Health learning journey! In this learning journey, you will explore connections between human health and environmental changes.

Before you begin, please complete [this short survey](#) [link will appear on platform]. *Please note that this is a private reflection and your responses will not be shared with the other members of your walking party.*

After you have completed the survey, we invite you to begin your journey by learning about the journalist Paul Salopek's Out of Eden Walk. Paul is walking around the world practicing "slow journalism." This means that he is slowing down to observe the world closely and listen carefully to others, sharing stories and observations along the way. Many of his stories are connected to human health and environmental change. His journey is called the [Out of Eden Walk](#). If you would like to learn more about Paul's walk, watch this [video](#).

- **Watch** this [Bill Nye video](#) about changes in biodiversity (which connects to Planetary Health, a topic you will learn more about later in this learning journey).
- **Watch** [The Health Impacts of Climate Change](#)
- **Watch** [this slideshow](#) and learn about the connections between human health and the environment that Paul has observed along his walk.

#### **DO AN ACTIVITY**

Take a walk in your own neighborhood, local area, or in or near your school. Notice things that may have an impact on human and environmental health. In other words, notice things that may have an impact on your health, on the health of people in your community, or on the health of the environment.

Things that impact health can make people and the environment healthier, or less healthy.

As you walk, think about:

- different kinds of human health, such as illness, injury, diet and nutrition, and mental health
- different aspects of environmental health, such as air, water, land, animals, plants, and ecosystems.

Try to stop and notice at least 4 things. Each time you stop, sketch, describe, or take pictures of what you see. Write down your ideas and questions:

- Ideas: How does the thing you have noticed impact or connect to health?
- Questions: What questions do you have? What do you want to learn more about?

Once you have completed the activity, post your work to the platform, including any pictures,

sketches, and writing you choose to include. We hope you enjoy Footstep 1!

### **INTERACT WITH YOUR WALKING PARTNERS**

Now it's time to find out what other students saw as they walked through their neighborhoods. We hope you enjoy looking at all the different photos!

- Choose two posts from other students to look at and respond to. Write a comment in which you use the following dialogue tools:
  - **NOTICE:** What stands out to you or catches your eye in the photo and story shared?
  - **APPRECIATE:** Share what you like, value, or found interesting. Be specific.
  - **EXTEND:** Did the post extend your thinking or give you a new perspective? If so, share how.
  - **NAME:** How does your personal experience or the place you live influence your perspective on the post?
- Respond: Return to your own posts. Respond to anyone who left comments or questions for you. Try to keep the conversation going or join in on other conversations.

## **FOOTSTEP 2: UNCOVERING THE BIG IDEA OF PLANETARY HEALTH**

### **GET INSPIRED**

In the last activity, you took a walk in your neighborhood and noticed things that may have an impact on your health, the health of people in your community and the health of the environment. Now it's time to explore how the observations you made on your walk are connected to a big topic called **planetary health**.

To get started, watch [\*Uncovering the Big Idea of Planetary Health\*](#). ([here are some helpful tips on how to use OOEL video resources](#))

After watching the video:

- **Read** "[Introduction to Planetary Health](#)" to learn about planetary health
- **Watch** "[Big Changes in the Big Apple](#)"
- Do the following class activity:

#### *Class Activity*

As a whole class, choose one health impact and one environmental change from the video/document, "Introduction to Planetary Health." Put them in two separate circles on a board or a large piece of paper. As a whole class, start creating a web.

- Begin with the health impact. Brainstorm ideas by thinking about the **examples** and **causes** of the health impact. Write down any questions that come up along the way.

- After you've captured several ideas, move to the environmental change. Brainstorm ideas by thinking about the **features** of the environmental change—examples or characteristics of what it looks like in action.
- After you've captured several ideas, stand back and look at both webs. How could they be related? Using a different colored marker, draw any connections you see. As always, continue to document any questions.

### **DO AN ACTIVITY**

This activity invites you to explore the connections between human health impacts and environmental changes.

Revisit your post from Footstep 1. Look closely at your pictures and what you wrote. Choose one health impact that is related to something you noticed during your walk.

Now that you have chosen a *health impact* to focus on, choose from the following *environmental changes*:

1. Changes in land use
2. Changes in biodiversity
3. Pollution

Once you have chosen a health impact and an environmental change, do the following:

On a piece of paper or screen, write your health impact and environmental change in two separate circles. Make sure to leave space around them and between them for all the connections you'll uncover!

- Step 1: Begin with the health impact circle. Start your web by thinking of examples and causes of this health impact.
- Step 2: Move to your environmental change circle. Begin this side of the web by thinking of features of the environmental change you chose. As you are creating your web note any questions that you have. You can either include your questions in your web or make a separate list of questions (As you explore your environmental change, you might find that you have new ideas about the health impact that you chose. Feel free to add them to your web!)
- Step 3: Now take a look at the two sides of your web. Just as you did as a whole class, begin to draw connections between the two sides. As you think about connections, you may ask yourself the following questions: *What are some obvious connections? What are some surprising or hidden connections?*

It is important to post *clear* visuals of your webs, so others in your walking party can clearly see all the details of your work. Here are some tips:

- You can take multiple pictures of the different parts of your web and use an app to stitch the multiple images together.
- You can film a short video of your web and post it using Google Drive or YouTube. If you choose this option, be sure to hold the camera steady and zoom in on the different parts of your web so that your walking partners can see all of your work clearly.
- If you have a camera that can create high resolution pictures, step back from your web and hold the camera steady to take a picture of your entire web.

### **INTERACT WITH YOUR WALKING PARTNERS**

- Explore the webs that other participants in your walking party have posted.
- Write detailed comments and questions for two walking partners, including one who is not in your class or program. Use one or more of the following dialogue tools:

- **NOTICE:** What stands out to you or catches your eye in this person's web? In other words, what did you notice in particular? Be specific.
- **PROBE:** Probe for more details. Do you see any connections in this person's web that you don't understand? Ask questions that will help give you a better sense of another person's perspective.
- **EXTEND:** Share how this post extends your thinking or gives you a new perspective. Did it help you to think about your own web in new ways?
- Respond to any comments or questions your walking partners have left for you, or join in other conversations in your walking party.

### FOOTSTEP 3: ZOOMING IN, REPORTING OUT

#### **GET INSPIRED**

Welcome to footstep 3! In the last footstep, you began to look through a *Planetary Health Lens*. You chose one kind of environmental change and one kind of health impact, and you made a web that explored connections between the two. In this footstep, you will continue to look through a *Planetary Health Lens*, but now you will zoom in on one topic or idea. Get inspired by exploring one or more of these resources:

- **Watch** [The Story of Microfibers](#) (If you did Learning Journey 2, you may have already seen this video, but it is worth watching again!)
- **Watch** ["Do Cities Need More Green Roofs?"](#)
- Revisit a web by another student in Footstep 2 that interests you, and that you *didn't* comment on in the last footstep. Focus on one particular part of the web and write a comment or question about it. Use these two sentence stems when making your comments:
  - I'm looking at the part of the web where...*[identify the part of the web you want to comment on]*
  - This makes me wonder... *[fill in with your ideas/questions]*
  - You can also read this dispatch by Paul: ["Walking With Animals"](#)

#### **DO AN ACTIVITY**

Now that you have learned a little bit about the big idea of planetary health, choose a topic related to it that you'd like to research/investigate on your own. Make sure to choose a topic that you can look at through a planetary health lens. In other words, pick a topic that relates to the interactions between humans and the environment. Below is a list of a few questions other students have chosen to explore:

- What are the effects of cars on the environment and on health?
- What happens to all the food we throw away?
- What is my community doing to help the environment?
- What are the main causes of deforestation, and what are the impacts?
- What are "green roofs" and how do they help cities?
- Do 4-lane highways affect biodiversity?
- Are there certain kinds of plants that can help clean polluted soil?

But don't feel limited by this list: find a topic that really interests *you*!

Here are some ways you can investigate your topic:

- Explore resources in the library or online.
- Interview an expert, or someone else connected to your question in some way.
- Make your own observations related to some aspect of your question. For example, take a walk in your own community or visit a specific place related to your question.
- Use information from books or articles you are currently reading or have already read.

You are not expected to be able to learn everything about your topic, but that is okay— scientists and researchers are still learning about planetary health topics too!

Present your research in the form of a short essay or a diagram. If you choose to share a diagram, please include text that helps your walking partners understand what you have discovered in your investigation. Along with the essay or diagram, you are also welcome to share a photo from your neighborhood that you think might relate to the issue you are researching.

End your research report by asking a question that other students viewing your post can respond to. The question will help your walking partners to comment on your work. Below are some examples of questions you could ask. Or feel free to make up your own question!

- Is there anything in your life that connects to this topic?
- What questions do *you* have about this topic?
- What parts of this topic would you like to learn more about?

Bonus: Before posting the results of your investigation, share your research with someone outside of this walking party, such as a family member, a friend, or another teacher.

### **INTERACT WITH YOUR WALKING PARTNERS**

- Choose at least one post in your walking party to respond to. Try to choose a post that is about a different topic than yours.
- Write a response to the question at the end of the post.
- Write another comment on the post using at least one of these two tools:
  - **APPRECIATE:** Share what you like, value, or found interesting. Be specific.
  - **EXTEND:** Describe how the post extended your thoughts in new directions or gave you a new perspective.
- Return to your own post. Respond to anyone who left comments or questions for you. Try to keep the conversation going or join in other conversations in the walking party.

## **FOOTSTEP 4: EXPLORING WHAT WE CAN DO**

### **GET INSPIRED**

In this footstep, you'll get the chance to look closely at your own life, in order to see how your own daily choices and routine can have an impact on environmental changes and human health.

- **Review** "[Introduction to Planetary Health](#)"
- **Remind** yourself of the environmental changes discussed in the previous footsteps:
  1. Urbanization
  2. Pollution
  3. Changes in Biodiversity
- **Watch** the following videos:
  - "[Man vs. Earth](#)" and "[Where Will We Go?](#)": What are your initial reactions to these spoken word poems? Why do you think the poets chose to create and share these pieces?
  - "[Let's Ban the Bead](#)": As you watch the animation, think about how the story relates to your life. For instance, do you or anyone you know use products with microbeads?

### **DO AN ACTIVITY**

In this activity, you will be using your *Planetary Health Lens* to explore how your daily choices connect to environmental change and human health, both in your community and in the wider world.

#### Step 1:

**Make a list** of 4 or more choices you make throughout your day that you could look at through a planetary health lens. In other words, what choices do you make that may affect the environment and human health?

Here are some areas where you might make choices:

- Where you go and how you get there
- What you eat
- What you purchase
- What you throw away or recycle
- What you do for fun

#### Step 2:

**Pick** one choice from your list that you think might have a *negative effect on the environment* and, in turn, have a *negative impact on human health*. Try to pick a choice that you have the power to make differently. Keep in mind that some of the choices we make we have a lot of control over– for example, we can choose to turn off the water while we brush our teeth. Other choices we make we may have less control over– for example, whether our families live in an urban or rural area, or where we get our food.

Identify alternative choices that you, and people like you, could make that would have a more positive impact on planetary health.

#### Step 3:

**Create** a resource that convinces others of the importance of the issue you have identified, and alternative choice(s) that could be made. Post your resource to the platform.

Your resource should:

- **Show** how your choice is connected to planetary health.
- **Explain** to others why the alternative choice you have identified is important.
- **Persuade and inspire** others to make similar changes.

Use any method you like to create your resource: slideshow, brochure, poem, spoken word, video, etc. \*Reminder: Do not show anyone's face (including your own) in anything you share!\*

### **INTERACT WITH YOUR WALKING PARTNERS**

- **Look** at some resources created by other members of your walking party.
- **Write** comments and questions on at least two posts that stand out to you.
  - **CONNECT:** Does their resource have a connection to you, your daily life, or the resource you created?
  - **EXTEND:** Were you convinced? Did your walking partners inspire you to consider making similar changes? Tell your walking partners whether or not you have been convinced, and share any changes you hope to make.
  - **PROBE:** Do you have any questions for your walking partners about the resource they created?
  - **NAME:** How does your personal experience or the place you live influence your perspective on the resource?
- Return to your own posts. Respond to anyone who left comments or questions for you. Try to keep the conversation going or join in other conversations in your walking party.

Congratulations on completing the *Introduction to Planetary Health* learning journey!

As a final activity:

- **Reflect** on your experience with this learning journey by answering questions in [this private reflection](#) [link to survey will appear on the platform].



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## Additional Resources

### EXPLORE

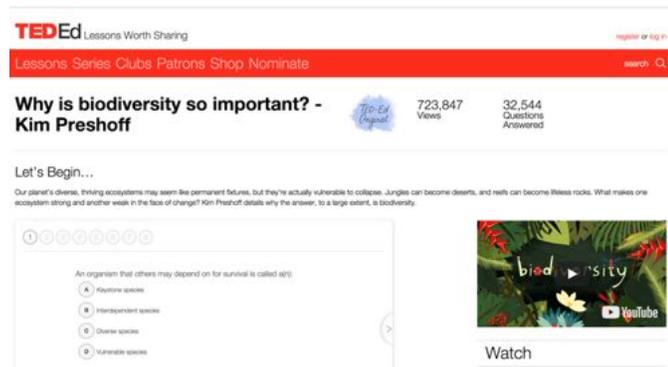
**Tool:** [The Power of Green: Classroom Resources on Energy Conservation and Safety](#)



**Projects:** [WWF: Ideas for environmental learning projects](#)



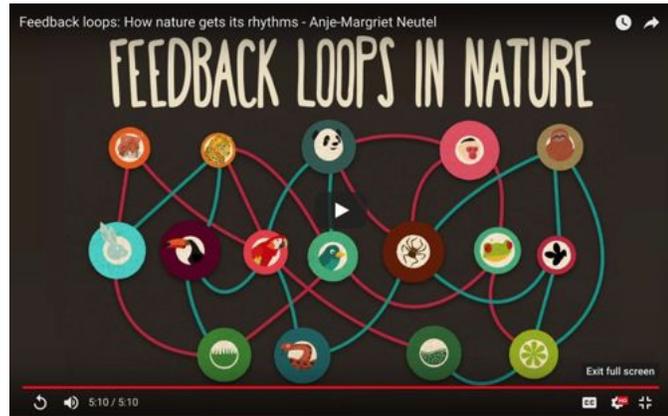
**Lesson Plan:** [Why is biodiversity so important? – Kim Preshoff](#)



**Lesson Plan:** [How long will Human Impacts Last– David Biello](#)



**Lesson Plan:** [Feedback Loops: How nature gets its rhythms– Anje Margriet Neutel](#)



**Website:** [National Oceanic and Atmospheric Administration](#)



**Lesson Plans:** [EarthWatch Institute](#)



**Lesson Plan:** [Student Reporting Labs STEM Lesson Plan: Protecting green space through hands-on learning](#)



## WATCH

**Video:** [UN Environment Seven Billion Dream. One Planet. Consume with Care.](#)



**Video:** [OPERAs Project Ecosystem Services in Brief](#)



**Videos:** [Crash Course Kids](#)



**Video:** TED-Ed

[Why is biodiversity so important?](#)



**Video:** National Geographic

[Climate 101: Deforestation](#)



**Video:** [Climate Change 101 with Bill Nye | National Geographic](#)



## READ

Article: [The Roof is Growing!](#)

**The Roof is Growing!**  
A top-down approach to saving the environment

EXPLORE THE BENEFITS WATCH VIDEO CAREER DISCOVERY TEACHER RESOURCES

### What's a Green Roof and How Does it Help the Environment?

A green roof replaces traditional roofing with a lightweight, living system of soil, compost, and plants. It creates a thin, green skin atop a building that gives a little something back to the world.

The plants and the dirt and gravel that hold them filter rainwater and some of its pollutants. The plants produce oxygen that help clean the air. A green roof reduces a building's heating and cooling costs, acting as a form of insulation. And they lessen the heat island effect, in which buildings warm up so much that they heat the surroundings.

**Cool Cities** **Clean the Air**  
**Manage Stormwater** **Build Habitat**

Green Roofs help cool cities, clean the air, build habitat, and manage stormwater.

[VIEW BENEFITS OF A GREEN ROOF](#)

### Career Discovery: Landscape Architecture

Learn how a landscape architect creates a Green Roof!

### Our Root is Growing

The Green Roof is on the HQ-A Building in Washington, D.C.

[TEACHER RESOURCES](#)