





EARTH DAY FAMILY VIEWING GUIDE

# Ada Twist, Scientist

## Season 4, Episode 3: **"The Green Team"**



Nature Lab is intended to share the places, science and conservation stories of The Nature Conservancy with the next generation, with a focus on helping students connect what they see on the screen to actions they can take in their own backyard.



### This Earth Day, join Ada Twist, Scientist and the Green Team!

Your family or local community group can join The Nature Conservancy and Netflix to learn alongside *Ada Twist, Scientist* and her friends. Explore some of the ways individuals can become stewards of nature through everyday actions that benefit our planet. From greenhouse gas emissions and clean energy to the importance of pollinators and community gardens, *Ada Twist, Scientist* helps little ones understand climate change and how they can create change to protect the earth. Host your very own Earth Fest and encourage others to become climate superheroes, too.

## Watch Ada Twist, Scientist on the Netflix Jr. YouTube channel.



ART

## Learn with Ada Twist and friends

**ESSENTIAL QUESTION** 

## What impact is climate change having on our planet?

### ACTIVITY

WATCH:



Ada Twist, Scientist – Season 4, Episode 3 -"The Green Team" on Neflix Jr's YouTube channel and dive deeper into some of the science concepts presented.



#### DISCUSSION

Use the following discussion questions with your family to spark a conversation about some of the science topics that *Ada Twist, Scientist* introduces in the episode.

- 1. Ada Twist, Scientist decides to make plates out of banana leaves because they are natural, or biodegradable, which means they will decompose. Banana leaves that decompose naturally, break down and turn back into soil. What are some things in our home/community that are biodegradable? What are some things that aren't?
  - Kids might point to the food in their homes, the plants that die in the winter, or even the paper in their school notebooks.
- 2. Iggy Peck, Architect explains that community gardens are good for the environment because they cut down on **emissions**. Why is local food better for the planet?
  - Kids might point out that food that must travel far, uses cars that release emissions into the atmosphere. To help kids understand why local food is better for the planet, pause and watch these quick Nature Lab explainers on Food and Carbon: The Local Tomato and The Industrial Tomato.
- 3. Benny B powers his DJ equipment with solar panels. We use energy to power our lives every day—to boot up our computers, fuel our cars, charge our cell phones, flick on a light switch, and in many other ways. **How can we get the energy we need without harming nature?** 
  - Encourage kids to think of other clean energy sources like wind! Want to learn more? Join TNC scientist Alex Wegmann as we embark on a Virtual Field Trip to learn all about renewable energy.
- 4. When they travel back to present day, Iggy explains that there are fewer lizards because of climate change. Arthur asks: "What does weather have to do with lizards?" and Ada explains that weather and climate are actually different! **Climate change is affecting lots of species, like Arthur's beloved lizards! What other animals might be affected by a warming climate?** 
  - Kids might point to the polar bears or even the birds, butterflies, and bees in their own communities. Want to dig deeper? Watch this Nature Lab clip explaining the difference between climate and weather.
- 5. Ada Twist, Scientist asks: **"If we can't convince Arthur the earth is more important than a movie, how are we going to get everyone else to care?"** Sometimes it can be hard to get others to understand why protecting the earth is so important. But it is super critical to get others on board! How can our family take what we've learned beyond our own home?
  - Kids might suggest having conversations with family members. The Nature Conservancy created a resource to help you talk to your community about climate change. Download the Let's talk Climate Guide



Share your reflections with us on social media and help us spread the word!



**2 ESSENTIAL QUESTION** 

What can we do to create change in our own community?

#### → ACTIVITY

**Pick one day this month to host an Earth Fest of your own.** Make this a family activity or go bigger and get your community involved. Earth Fest can be done at home, school, or even in your neighborhood. Share this toolkit with anyone you want to participate and invite others to brainstorm, create, and be the change this Earth Day! Follow the steps below to have a successful Earth Fest!

#### 1. Learn more about the issues



Ada Twist, Scientist and the Green Team explore many issues throughout the episode. Kickstart your Earth Fest planning by learning more about the issues. Use these prompts and resources to start a conversation about some of the problems facing our planet and what we might do to help resolve them with a new creation or by changing our behaviors.

**Food:** Human activities like driving long distances contribute to the warming of the planet. That's why food produced locally, in school gardens, backyard gardens, and local farms, can help prevent CO2 emissions associated with transporting food very long distances. And gardens are also beneficial because plants help absorb CO2 in the process of photosynthesis. Learn more

**Energy:** Renewable resources include the sun and wind. These are things that can be "replenished" or are not used up. Nonrenewable resources include fossil fuels like coal and oil that took a long time to form and are not as easily replenished. Unlike the nonrenewable energy sources that humans often currently use (fossil fuels, coal and natural gas), solar and wind power are usually available in a never-ending supply. **Learn more** 

**Pollinators:** A garden provides habitat for many diverse species, small and large. Kids can explore the biodiversity of their garden, the relationships between species and learn more about the important role of pollinators. Learn more



#### 2. Brainstorm ideas to solve an issue



The Green Team had some great ideas for Earth Fest. Discuss those ideas and come up with new ones. Use the information below to learn more and lead the brainstorming session.

#### Food waste is easy to cut using quick tips like these:

- Keep a shopping list to only buy what you need. Remember, bulk buying only saves money if you're sure you'll eat it all.
- Keep leftovers as an easy snack or meal for later.
- Learn about how best to store food to keep it fresh and edible. Check what the different date labels really mean.
- Worried you've ended up with more food than you can eat? Look up convenient local donation options with a quick online search, or find ways to freeze, pickle or ferment it.

**Suggestions:** Ada Twist, Scientist decides to make plates out of banana leaves, which is a great way to prevent food waste! What are some things in our home/community we can do to reduce food waste.

a. Kids might point to setting up compost bins, reducing what they buy at the grocery store, making shopping lists to avoid buying too much, and always eating the leftovers.

• Rosie explains that fashion can be wasteful. She decides to turn old clothes into new ones. How else can we eliminate fashion, or clothing, waste at home and in our community?

**Suggestions:** Put together a repair kit to mend clothing rather than throwing away, create a recurring community clothing swap, cut up old clothes into reusable kitchen rags

• Iggy Peck, Architect explains that community gardens are good for the environment because they cut down on emissions and provide food for the community.

**Suggestions:** The Nature Conservancy's Nature Lab has an entire series on gardens just for kids! Watch together and think of some ways a garden can be a part of your family/community Earth Fest!

 When traveling back in time, Rosie points out that there were way more trees and plants in the past. The local park also used to have a lot more pollinators, like bees and butterflies. Pollinators are animals that move pollen from one flower to another so that the plants can produce fruits and seeds. Most pollinators are insects, including bees, wasps, butterflies, flies, ants, and beetle, but some plants are pollinated by birds like hummingbirds. Without pollinators, we wouldn't have much of the food we eat since without pollination the plants can't produce the seeds needed to grow more plants.

**Suggestion:** A garden provides habitat for many diverse species, small and large. In this Nature activity, students can conduct habitat surveys in their garden to track, measure, and report on the biodiversity of their garden, exploring relationships between species and learning more about the important role of pollinators. This can be a great Earth Fest activity for the whole family!



PART

#### 3. Plan your creation

Use your imagination to come up you're your solution to an issue YOU care about! Drawing out your plan can help you figure out what materials you will need, how much time it will take you, and who to ask for help.





PART 3

#### 5. Build the solution



The Green Team gets creative and gathers materials to build their innovative Earth Fest creations! What can be used to create your own inventions? This is a great opportunity to reuse materials you might already have around your house/community.

Some places to look include:

- The recycling bin
- The trash bin
- The kitchen—empty containers can be useful in many ways
- Anywhere you keep old fabrics, papers, and other natural materials
- Outdoors—are there natural materials that could be used such as grass clippings, rocks, branches, or fallen leaves?
- Your local thrift store—don't have something you need? Reuse and recycle by visiting your local secondhand shop.

It's time to put your plan into action and create the change you've designed. Whether building a pollinator garden, starting a compost pile, or changing your energy consumption habits, every action can make a big difference. Use this Earth Fest event, at home or in your school and community, to get everyone involved.

## By doing things a little differently to protect the earth, you can become a Green Team superhero, too.







Check out Netflix.com/FamilyEarthWeek for a collection of family-friendly Sustainability Stories.