"You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of a difference you want to make." - Dr. Jane Goodall, primatologist, conservationist

Dear Educator,

Wildlife around the world continue to be threatened at an alarming rate due to climate change, habitat loss, and other human impacts. Many young people want to help. Enter Jane Garcia, a spirited young activist-in-training, and the title character in the new series, *Jane* on **Apple TV+**. Full of grit and determination, and ready to save the world, one animal at a time, Jane's message of action and hope will inspire your students to join her in making a difference in the effort to save animals and help preserve the biodiversity of the planet.

This free educational program from Apple TV+ and the curriculum specialists at Young Minds Inspired will motivate your students to learn about endangered animals, the cause/effect relationships within ecosystems, and how animals are impacted by human activity. In the process, they will be motivated to take action by making small changes in their daily lives to help protect the planet. The program features ready-to-implement activities that support your social studies. science, and language arts curriculum. It also encourages family engagement with a take-home letter with ideas families can do together.

Your class can also get hands-on with two DIY activity videos inspired by the series. These instructional videos teach viewers how to make a vegetable pizza and how to create flower planters to support honeybees. The videos, accompanying downloadable instructions, and activity sheets can be used in school or at home with an adult.

Please share these resources with other teachers in grades 3 to 5. And visit **ymiclassroom.com/feedback-jane** to let us know your thoughts on this program. We look forward to receiving your comments.

Sincerely,

Dr. Dominic Kinsley Editor in Chief Young Minds Inspired



Questions? Contact YMI toll-free at 1-800-859-8005 or by email at feedback@ymiclassroom.com.

Be an Animal Champion Inspired by



About Jane

Nine-year-old animal activist-in-training, Jane Garcia is on a mission to save the world, one animal at a time in the new series from **Apple TV+**, *Jane*, premiering on April 14. Inspired by the life and work of leading primatologist and conservationist, Dr. Jane Goodall, *Jane* invites viewers into a world where young Jane's powerful imagination brings together education and activism. Jane is always imagining her way to anywhere in the world where she, her best friend David, and a chimpanzee named Greybeard can be a voice for animals against the threats they face from human impact on the planet. Like her hero, Dr. Goodall, Jane empowers young people to take small steps that can lead to big changes.

Target Audience

Grades 3-5

Program Components

Available at **ymiclassroom.com/jane**:

- This teacher's guide
- Four reproducible student activity masters
- A reproducible take-home letter
- Two DIY activity videos plus downloadable instructions and activity sheets
- An educational standards chart
- An online feedback form

Program Objectives

- Reinforce concepts of habitat/ ecosystems and raise awareness of endangered animal species
- Strengthen cause/effect reasoning
- Support understanding of human impact on earth systems
- Encourage social-emotional learning with an emphasis on compassion and youth-empowerment

How to Use This Program

Make photocopies of the activity sheets, as well as the family letter to send home. Students will need pencils, blank lined paper, markers and/or colored pencils, index cards, and rubber bands. You will also need a computer with sound and streaming accessibility in your classroom.

Activity 1 Observe to Learn, Learn to Care

Distribute the activity sheet and discuss the featured information about Dr. Jane Goodall. Then share this brief introductory video with students: www.youtube.com/watch?v=n4SpRnujdjg&t=193s. Students might also visit janegoodall.org/our-story/our-legacy-of-science/ to learn more about Dr. Goodall's important discoveries.

Have your students do their own animal observations by viewing a live animal webcam for 10 minutes (see webcam list below). Give them time to record their



observations on the activity sheet chart and draw a sketch of the animal on the back of the sheet. Then have the class share and compare their general observations and what they learned about the animal through observation. (Note: Webcams can show potentially disturbing animal behaviors, such as eating prey; plan to preview the webcams listed here to select one appropriate for your students.)

- Birds: www.allaboutbirds.org/cams/#
- Pandas: https://nationalzoo.si.edu/webcams/panda-cam
- **Elephants:** https://explore.org/livecams/african-wildlife/tembeelephant-park
- Brown Bears: https://explore.org/livecams/brown-bears/river-watch-brown-bear-salmon-cams

Activity 2

What a World of Animals

Distribute the activity sheet and read and discuss the information about endangered or vulnerable animal species as a group. Then have students complete the matching activity individually. Review the answers as a group.

Answers: 1. polar bear 2. white shark 3. honeybee 4. golden-crowned flying fox 5. gharial 6. blue whale 7. monarch butterfly 8. black rhino 9. tiger 10. caribou

Have students work in groups to research the endangered animals in the activity as well as other endangered animal species. Challenge students to find two to three fun facts about their group's animal and one threat it faces. Ask students to record their research on blank index cards to create World of Animals card sets, with a drawing or photo of the animal on one side and the fun facts and threat information on the other.

Below are online resources students might check out for their research:

- www.activewild.com/endangered-animals-facts-for-kids/
- https://ecos.fws.gov/ecp/report/boxscore
- www.iucnredlist.org
- www.worldwildlife.org/species/directory?sort=extinction_ status&direction=desc

As a follow-up, create an animal-saver quilt by having each student create an image of an endangered animal on paper or by using felt squares and cloth. Staple the paper or glue the felt squares together to create a class quilt to display in the classroom or school hall.

Activity 3

You Can Make a Difference

Distribute the activity sheet and review the Animal Saver Vocabulary words with students. Remind them how earth systems (atmosphere, geosphere, biosphere, and hydrosphere) work together to support a healthy planet and help connect everything into one system. Review the Waste Hierarchy graphic with students and have them match the actions to their corresponding level of the hierarchy.

Answers: 1. reduce (energy and water use) 2. reduce 3. reduce/refuse (eating meat increases use of water, land, and energy resources) 4. reduce (energy use) 5. refuse 6. refuse 7. refuse 8. reuse 9. dispose 10. reuse 11. reuse Have students complete the prompts to describe actions they

this video on the recycling process to help inspire students: www.youtube.com/watch?v=VlRVPum9cp4.
Encourage students to share their lists before taking

can take to help bring about change. You might share

them home.

Activity 4 Small Changes, Big Impact

Explain to students that Jane's hero, Dr. Jane Goodall, believes in the power of young people to help make a difference, and that she started an organization called Roots & Shoots to help them do just that. Then share this video about Roots & Shoots with students: https://vimeo.com/800445384.

Distribute the activity sheet and have students complete and score themselves on the Changemaker self-quiz statements. Then help students brainstorm a list of potential areas for small changes of habit in the classroom that could have a big impact over time in the way the class uses resources. Examples include reducing paper use/waste, reducing trash on school grounds and from excessive packaging of snack food items, etc.

Next, assign student groups one of the actions from the list that the class can take on as a project. Direct groups to complete Part 3 of the activity sheet together. Plan time for each group to present their project ideas, then vote on a plan that you want to implement. Arrange to share your class project with the greater school community to make a bigger impact.

Extension Activity: Extend project work from the school grounds and into the local community. Visit **https://rootsandshoots.org/resources/project-planning-guide/** for detailed lesson plans to engage students in a long-term project on the local level.

There's More Online!

Check out **ymiclassroom.com/jane** for two DIY activity videos, instructions, and activity sheets inspired by **Jane** to share with families or do in class to help protect sharks and honeybees. You can also learn about Jane's drive and passion for animals with **Jane's Endangered Animal Guide**. Featuring scenes from the show and fun graphics, this book draws readers deeper into Jane's adventures while also keeping them grounded in the real world, encouraging them to do what they can to make a difference. Download a free excerpt at the website above.

Jane's Endangered Animal Experience

Complementing *Jane*'s honeybee episode, the Jane's Endangered Animal Experience (first to the California Science Center and Pittsburgh Carnegie Natural History) invites visitors to join Jane and her friends to figure out why honeybees around the world are disappearing. Kids can experience the world as bees do, interacting with scaled up models of flowers, for a hands-on opportunity to learn about the world of pollinators and the role they play in the global ecosystem. Check with the museums for more details.

Resources

Jane: apple.co/Jane

Roots & Shoots: http://joinjane.org/ Jane Goodall Institute: janegoodall.global

U.S. Fish and Wildlife:

https://fws.gov/program/endangered-species **In-school program:** ymiclassroom.com/jane



OBSERVE TO LEARN, LEARN TO CARE



Dr. Jane Goodall is a primatologist and conservationist. She studied chimpanzees in Africa and discovered that they showed many human-like behaviors and could make simple tools with materials from nature. Dr. Goodall travels around the world to help us learn to care about saving animals. She believes in the power of young people to make a difference.

Animal Saver Vocabulary

Conservationist: a person who works to help protect, defend, and save natural resources

Primatologist: a scientist who studies non-human primates like monkeys and apes

Animal Cam Observation

Observing animals helps us learn about them, the threats they face, and the kinds of changes we can make to help protect them. Scientists use cameras, satellite tags, and acoustic sensors to monitor animal movements and sounds. They also use computers and notebooks for notes and sketches. It's your turn to practice animal science by making observations! Complete the chart below as you observe an animal on a live animal cam. When done, draw a picture of the animal on the back of this sheet.

Animal:	Location of Animal (natural setting or zoo):		
Date:	Time:		
Observation #1:	Describe the animal's habitat.	How does the animal move?	
Observation #2:	Why do you think the animal is doing what you observe it doing?	What does the animal sound like?	
Observation #3:	What do you wonder about this animal? what do you wonder about this animal? aws, etc.)		



WHAT A WORLD OF ANIMALS

Did you know that around 2,000 endangered species go extinct every year? Scientists tell us that we are losing animals to extinction today faster than at any other time in earth's history. A lot of this is because of how humans use earth's natural resources.

You can help change things. To start, be a voice for animals. Let others know how important they are to the places they live and why they are endangered by problems like climate change, habitat loss, and pollution.

Facts About Endangered Animals

Here are just a few of the endangered or vulnerable animal species that need help. Test your animal knowledge by matching each fact with the animal in the word bank it describes.

Animal Facts

- 1. I am the largest land carnivore. I can live up to 30 years. There are only 30,000 of me left in the world.
- 2. My species has been in existence for more than 400 million years! As a pup, I weigh as much as a car and can hunt as soon as I'm born.
- 3. I live in every continent except Antarctica. I can flap my wings over 200 times per second. I do a waggle dance to communicate with my friends.
- 4. I am frugivorous, which means I only eat fruit. I make a chirp sound when I talk to my friends and love to nap upside down.
- 5. I am a type of crocodile. I am very shy and hide from humans. I have over 110 razor-sharp teeth. My snout is long and skinny and has a bulb on the end of it!

Word Bank

black rhino monarch butterfly tiger blue whale great white shark gharial polar bear caribou honeybee golden-crowned flying fox

- 6. I am the largest and loudest animal on the planet and can live to be 110 years old! The ocean is my home.
- 7. I only live for 2-6 weeks and use the sun to know where I need to go. I smell with my antennae and am poisonous to predators like birds, frogs, and mice.
- 8. My horn comes in handy for digging for food and also for looking tough when I'm up against a predator.
- 9. There are fewer than 4,000 of me in the world. A group of me is called an ambush or a streak. No two of my kind have the same stripe pattern.
- 10. I make one of the longest animal migrations on the planet! I use my hooves to dig in the snow for my favorite food, lichen, a plant-like organism made of fungus and bluegreen algae.



YOU CAN MAKE A DIFFERENCE

The whole planet is like a web. It's all connected! Everything we use in our daily lives comes from some kind of natural resource. When we buy new things, throw away old things, or make things on our own, like new buildings, we are using up natural resources. This is harmful to the biodiversity of our planet. For example, deforestation to create the lumber for new buildings leads to the destruction of habitats for monarch butterflies and caribou.

Animal Saver Vocabulary

Biodiversity: the variety of life forms on our planet

Natural resource: materials from the earth that support life

Hierarchy: system of ranking or organizing things

The Waste Hierarchy

The Waste Hierarchy helps us think about small ways to take better care of our planet.

We need to do more of the actions at the top of the hierarchy to protect the ecosystems and habitats where animals live.

prevent waste by buying things that
use fewer natural resources

Reduce: lower the amount of waste produced

Reuse: use things more than once and in different ways

Recycle: use old things to make new ones

Dispose: safely throw away anything that can't be reused or recycled

Changemaker Actions

Match each action below to where it belongs on the Waste Hierarchy. Then use the space at the bottom of the sheet to write one action you plan to take for each part of the hierarchy.

- 1. Take shorter showers. _____
- 2. Use both sides of paper.
- 3. Eat less meat.
- 4. Turn off electronics when they aren't in use.
- 5. Don't use single-use plastic.
- 6. Buy products with the least amount of packaging.
- 7. Only buy what you need. _____
- 8. Carry re-usable water bottles.
- 9. Safely dispose of non-recyclable trash.
- 10. Donate outgrown clothing to shelters or thrift stores. _____
- 11. Collect rainwater to use in watering plants.

Complete each sentence by describing how you will help animals and the environment:

- I will reduce by
- I will reuse by_____
- T WIN TEUSE BY

Share your ideas
with your family!
Choose one Changemaker
action you can all try
together for at least one
week to make
a difference!

I will recycle by



SMALL CHANGES, BIG IMPACT

Part 1 Changemaker Self Quiz – Change Starts with You!

We may be young, but our words and actions are still powerful. Are you on the road to making small changes that make a difference? Take this quiz to find out!

Mark each statement as YES or NO. Each YES answer = 2 points, NO answer = 0 points.



Action		No
1. I pack a waste-free lunch at least once a week.		
2. I remind my parents to take reusable grocery bags for shopping.		
3. I reuse my bathroom towel instead of putting it in the dirty clothes after one use.		
4. I shop for healthy snacks with the least amount of packaging.		
5. I like to shop at thrift stores.		
6. I like to create art from recyclable materials.		
7. I recycle plastic, paper, glass, and metal at home.		
8. I stop to think about whether I really need something before I ask my parents to buy it.		

My Score:

Part 2

0-2 points: Add more daily habits that help make a difference! 4-6 points: You are on your way to becoming a Changemaker!

6-8 points: You're a Changemaker pro, just like Jane!

It's Time to Take Action!

Decide on one small change you can make and practice it for one week to make it a habit. Then, just like that, you've made a change that makes a difference!

I pladaa ta usa	less resources for a	t loast one wook b	
i piedde to use	less resources for a	it least offe week b	V

(action)

Part 3 Changemaker Project

What are some of the ways your class may be using too many resources at school? Brainstorm ideas with your group. Then create a plan for a project your class can do together that will help you use fewer resources at school. Use the back of this sheet to describe the following:

back of this sheet to describe the following:	
 Our plan Motto or quote we will use for our campaign Badge or logo design for our campaign 	
Once done, work as a team to put your plan into action!	
CtV+	

Be an Animal Champion Inspired by



Dear Families,

At school, your child is on a mission to learn more about protecting animals and the earth. Leading the way is 9-year-old animal-activist-in-training, Jane Garcia. Jane is on a quest to save endangered animals, teaching kids why these animals need our help, and what they can do to make a difference. Jane's epic adventures, inspired by her hero Dr. Jane Goodall and her imagination, are featured in the new series, *Jane*, premiering on **Apple TV+** on April 14. Each episode also provides tips on how we can all help protect animals and the planet.

Dive in at home to support your child's learning and protect the earth as a family! View and discuss the show together. The first episode is available for free, with no **Apple TV+** subscription required. Then try out these ideas, inspired by **Jane**, to get started with your own conservation activities:

- Choose Your Own Adventure: Think of a project to engage your family in making positive changes, then spread the word! Try a waste audit to start! Check out https://greencleanguide.com/how-to-conduct-an-at-home-waste-audit/. Use the Family Toolkit at the Roots & Shoots website to help make a plan: https://rootsandshoots.org/resources/roots-shoots-family-toolkit.
- Let It Rot: Help keep greenhouse gasses produced by food waste out of the atmosphere by composting fruit and veggie scraps. While you're at it, buy only what your family will eat for one week to save food from wasting before you're able to eat it. Learn more at www.npr.org/2020/04/07/828918397/how-to-compost-at-home.
- Volunteer and Attend Eco-friendly Events! Many cities across the country host clean-up days or weed removal. Taking your child to Earth Day or endangered species day events is another way to get ideas for change. Check out www.earthday.org and www.endangered.org/campaigns/endangered-species-day/ for more information.
- **DIY Activity Videos:** Visit **ymiclassroom.com/jane** for videos on making vegetable pizza and flower pots. These crafts can help sea life and bees! Check out the videos to learn how.

Visit Jane's Endangered Animal Experience (coming first to the California Science Center and Pittsburgh Carnegie Natural History) where kids and families can go on an adventure to figure out why honeybees around the world are disappearing. Visitors shrink down to honeybee size, just like Jane does in the honeybee episode, to learn about the role pollinators play in the global ecosystem. Check with the museums for more details.

Add to your child's excitement for Jane with Jane's Endangered Animal Guide. Featuring scenes from the show, along with fun graphics produced in collage-style, this book draws readers deeper into Jane's adventures while also keeping them grounded in the real world, encouraging them to do what they can to make a difference. Download a free chapter at **ymiclassroom.com/jane**.

