



THE PAPER GIRLS SHOW

EDUCATIONAL GUIDE

EPISODE 6: PAWS-ITIVELY FABULOUS

TOPICS: ANIMAL HABITATS AND ENVIRONMENT

EPISODE SYNOPSIS

Jenni-ferret sprains her leg, and Edie, Caily and Reese 3D print a wheelchair. In Confetti, the Shredders accidentally ruin an animal habitat, prompting Kami to rebuild a better one.

FEATURED STEAM TOPICS

BIG IDEA – Plants, animals and humans share the world and humans are responsible for protecting their habitats on land and in water.

EXPLANATION FOR CHILDREN:

A habitat is a place where plants, animals, and other organisms makes their home. In order to survive, a habitat must meet all of the environmental conditions the plant, animal, or other organism needs to survive.

Good plant habitat must provide the right combination of light, air, water, and soil for the specific type of plant. For animals, fish, and insects, the important parts of a habitat are shelter, water, food, and space.

RELATED CONTENT STANDARDS (CORE CURRICULAR AIMS) IN THIS EPISODE

The standards and curricular aims listed below are linked to this episode's extension activities. Each activity is designed to promote children's understandings of earth science as they use the visual arts support their understandings of plant and animal needs.

1-Earth Science: Interdependent relationships in ecosystems: Animals, plants, and their environment

Communicate solutions that will reduce the impact of humans on land, water, air, and/or living things in the local environment.

Earth Science: Understanding Ecosystems

All animals need food to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

Living things need water, air, and resources from the land, and they live in places that have

the things they need. Humans use natural resources for everything they do.

Source: NGSS Lead States. 2013. Next Generation Science Standards: For States, By States. Washington, DC: The National Academies Press.

Visual Arts: Creating

Engage in self-directed, creative making.

Engage collaboratively in creative art-making in response to an artistic problem.

Use observation and investigation in preparation for making a work of art.

Make art or design with various materials and tools to explore personal interests, questions, and curiosity.

Source: National Coalition for Core Arts Standards. (2014). National Core Arts Standards: Visual Art, Grades Pre-K to 12. National Coalition for Core Arts Standards.



ACTIVITY EXTENSIONS FOR EPISODE TOPICS

In this episode, children are introduced to ideas about habitats, pollution, and taking care of animal needs. Below is a brief listing of activities that invite children to explore how they can work to take care of the habitats animals and other organisms need to survive. In each activity the emphasis is on the process of thinking, design, and making rather than a perfect end product as children take the lead in their own investigations. Parents and teachers can support children in their work by asking prompting questions such as: What do you think people need to know about pollution?; How can you share that information with them? What does your plant need to survive?; What do you know about the animal you chose?; What are important parts of their habitat? Why do you think that?

1. Reclaimed Take Care of the Earth Posters

In this simple extension activity you can invite your students to create posters that share information about how to take care of the earth with others. Begin by inviting the children to brainstorm what they know about taking care of the earth and pollution. Take care to write their ideas down so they can reference them later. You can prompt their thinking by talking about the pollution of the pond in this episode as well as inviting them to share what they know about recycling and reuse. Using leftover paper materials –

– scrap paper, newsprint, magazines – and markers or crayons, invite the children to create posters about taking care of the earth. They can work individually or in groups to create their posters. Be sure to display the completed posters for others to see.

PROMPTING QUESTIONS

- What is the big idea for your poster?
- How will you reuse these materials in your poster?
- What do people need to know about your topic?; How can you share that?

One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia

Written by Miranda Paul

Illustrated by Elizabeth Zunon

Publisher: Millbrook Press

One Plastic Bag is a true story about a group of women in West Africa that work to take care of their environment and make it more beautiful by recycling.

2. Papier-mâché Seed Cups

This extension activity encourages your students to create a seed starter cup using scrap paper from the classroom that they can plant outdoors, and watch grow. Encourage children to gather and tear used paper into small strips. They will also need to select a small cup to use as their base for the papier-mâché (coat the outside of the bowl with a plant-friendly release agent such as olive oil). Once paper is torn, mix one part flour with one part water to make the papier-mâché paste. Children will dip the torn paper strips into the paste, removing excess with their fingers before layering on the outside of the cup. Continue until the bowl is covered and smooth out the strips. Let dry overnight and repeat with two additional layers.

Once the the final layer is dry, the base cup can be separated from the papier-mâché. Children can then fill their papier-mâché cup with soil and add seeds to grow. If starting the seeds indoors, be sure to put the seed cups into a tray to catch any excess water.

PROMPTING QUESTIONS

- Why is it important to find ways to reuse scrap paper?
- What will your plant need to grow?
- What will happen when we plant the cup and seed into the ground?; Why do you think that?

Extension Website:

University of Illinois Extension: The Great Plant Escape

<https://web.extension.illinois.edu/gpe/case1/c1facts3a.html>

3. Create a Triorama

This extension activity invites your students to create a paper-based triorama using just paper, scissors, tape, and drawing media (markers, crayons, colored pencils). To begin, children will need to fold an 8x8 or 10x10 square piece of paper in half horizontally and then vertically.

Open the paper and lay it flat like a diamond with the bottom point directly in front of you. Next, cut along the line, starting at the point closest to you, and stopping at the center point of the paper. Overlap the two cut triangles so that the paper pops up and creates a standing triangle shape. Tape the two bottom triangles together so that they stay. The children can now add images, drawings, cut paper creatures, and words to each of the three sides to showcase an animal and its habitat needs.

PROMPTING QUESTIONS

- Tell me about the habitat you're creating?; Who lives there?
- What does your animal need to grow and be healthy?
- What plants live near your animal?

Extension Website:

San Diego Zoo: Kids Corner Episode 2, Animal Habitats Video

<https://kids.sandiegozoo.org/videos/kids-corner-episode-2-animal-habitats>





ABOUT Angela Eckhoff, PhD

Angela Eckhoff, is an Associate Professor of Teaching and Learning and the Director of the Virginia Early Childhood Policy Center at Old Dominion University. Dr. Eckhoff studies the role of creativity in child development and learning, arts-based research and pedagogical practices, and early STEAM learning in both classroom and museum settings.

She is a co-editor of the Full STEAM Ahead column for Teaching Young Children from NAEYC as well as the author of ‘Provoking Curiosity’ and the four-book “Creative Investigations” series from Gryphon House Inc. Dr. Eckhoff holds a dual PhD from the University of Colorado–Boulder in educational psychology and cognitive science.