BIGINAL BILLINGS

Expeditions in Iducation



www.expeditionsineducation.org

Backpack the Parks!



At Expeditions in Education, we believe that learning extends far beyond the classroom walls. That's why we're thrilled to introduce our "Backpack the Parks" initiative, designed to ignite students' curiosity and love for the great outdoors while fostering a deeper understanding of our national parks.

With "Backpack the Parks," educators have the unique opportunity to curate and pack 8 engaging activities into backpacks, making it easier than ever for students to check out and explore the wonders of our national parks. From hands-on science experiments to wildlife scavenger hunts, each activity is carefully crafted to immerse students in the beauty, history, and natural wonders of these treasured landscapes.

Join us in empowering the next generation of park enthusiasts and conservationists as they embark on unforgettable learning adventures in our nation's most cherished natural spaces. With "Backpack the Parks," the journey to discovery begins with the turn of a backpack strap, and the possibilities for educational exploration are endless.



Step 1: Ask for Donations of Backpacks and Clean Them Up

- Reach out to parents, local businesses, or the school community to request donations of gently used backpacks.
- Inspect the donated backpacks for any damage or excessive wear.

Step 2: Print the Activity Cards and Laminate

- Prepare activity cards that detail each of the educational activities you plan to include in the backpacks.
- Print these activity cards on durable cardstock paper.
- Laminate the activity cards to protect them from wear and tear during use.

Step 3: Put Cards on Rings

- Hole punch each laminated activity card.
- Use rings or zip ties to secure the cards together, creating a set of instructions for each activity.

Step 4: Purchase or Collect the Materials Needed for the Activities

- Create a list of materials required for each activity, as outlined in your activity plan.
- Gather all the necessary materials for each activity. This may include items such as magnifying glasses, sketchbooks, rocks, clay, flashlights, and more.

Step 5: Put Materials in Ziplock Bags

- Organize the materials for each activity into separate ziplock bags.
- Ensure that each bag contains all the necessary materials, making it easy for students to access and use them.

Step 6: Attach the National Park Tag to the Outside of the Bag

- Create or print a National Park-themed tag that identifies the backpack as part of the Backpack the Park program.
- Attach this tag securely to the outside of the ziplock bag or backpack.

Activity 1: Wildflower Exploration Materials:

- Wildflower field guide or app
- Notebook
- Pencil

Instructions:

- 1. Let's become wildflower detectives in the Great Smoky Mountains National Park!
- 2. Grab a wildflower field guide or use a cool app on your tablet or phone to learn about the wildflowers there.
- 3. Use your notebook and pencil to write down the names and drawings of different wildflowers you discover.
- 4. We'll chat about why it's essential to protect these flowers and how they help the park's animals.

Activity 2: Stream Adventure

Materials:

- Large container (e.g., plastic tub)
- Small rocks or pebbles
- Plastic or toy aquatic creatures
- Water

Instructions:

- 1. Get ready for a stream adventure right at home!
- 2. Find a big container, like a plastic tub, to make your own mini-stream.
- 3. Put some small rocks or pebbles at the bottom.
- 4. Add plastic or toy aquatic creatures like fish or frogs to your "stream."
- 5. Let's talk about why clean water is super important for the animals in the park while we play in our mini-stream.

Activity 3: Tree Quest

Materials:

- Tree field guide or app
- · Leaves, twigs, or pictures of tree leaves
- Notebook
- Pencil

Instructions:

- 1. Get ready for a tree-tastic adventure in the Great Smoky Mountains!
- 2. Use a tree field guide or a fun app to figure out what kinds of trees live there.
- 3. Collect leaves, twigs, or snap pictures of leaves from the trees you see.
- 4. Write down what you find in your notebook.
- 5. We'll chat about why these trees are important for the park's animals and how they help the environment.

Activity 4: Birdwatching at Home

Materials:

- Bird identification guide or app
- Binoculars (if available)
- Notebook
- Pencil

Instructions:

- 1. Let's be birdwatchers from our homes, just like in the park!
- 2. Look out for birds in your backyard, at a nearby park, or from your window.
- 3. Use a bird identification guide or a cool bird app to figure out which birds you see.
- 4. Write down the bird names and any special things you notice in your notebook.
- 5. We'll talk about how important parks are for birds and why we need to take care of their homes.



Great Smoky

Mountains

Activity 5: Leaf and Bark Art Adventure

Materials:

- White paper
- Crayons or colored pencils
- · Leaves and tree bark from local trees

Instructions:

- 1. Time to become artists with leaves and tree bark from your neighborhood!
- 2. First, go outside and collect leaves and pieces of tree bark. They can be from any trees you find.
- 3. Come back with your treasures and grab some white paper and colorful crayons or colored pencils.
- 4. Put the paper on top of a leaf or tree bark and gently color over it. You'll see the cool shapes and textures appear like magic!
- 5. Let's talk about how different trees have unique leaves and bark, just like our artwork.

Activity 6: Nature Scavenger Hunt

Materials:

- List of natural items to find (e.g., pinecone, rocks, specific plants)
- Pencil

Instructions:

- 1. We're going on a fun scavenger hunt right inside our homes or around our local area!
- 2. I'll give you a list of things to find, like a pinecone or special rocks.
- 3. Take the list and a pencil, then go on the hunt! Look in your backyard, park, or even your room.
- 4. When you find something from the list, mark it off.

Activity 7: Super Soil Exploration

Materials:

- Small container with soil from the yard or garden
- Magnifying glass

Instructions:

- 1. Today, we're soil detectives, exploring the ground right outside our homes!
- 2. Get a small sample of soil from your yard or garden. You can use a container to hold it.
- 3. Use a magnifying glass to take a closer look at the soil. What does it feel like? Are there tiny things hiding in it?
- 4. Why is soil super important for plants to grow big and strong?

Activity 8: Nature Journaling Adventure

Materials:

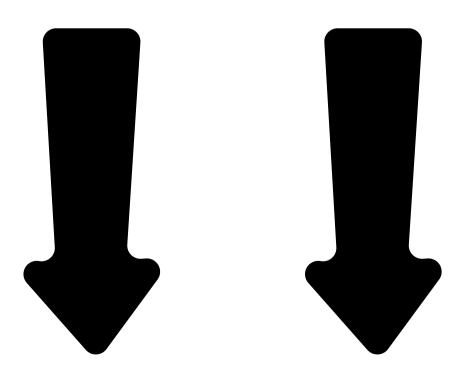
- Notebook or sketchbook
- Colored pencils or crayons
- Pencil

- 1. You're going to be nature explorers and keep a special journal of your adventures right at home!
- 2. Grab a notebook or sketchbook and some colorful pencils or crayons.
- 3. Whenever you see interesting things in your yard or around your home, like birds, flowers, or cool bugs, draw, write, or describe them in your journal.
- 4. Your journal is like a treasure chest of all your nature discoveries!



Activity Cards

Print on cardstock Laminate Put on rings



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BAG TAG BELOW!



Great Smoky Mountains National Park Backpack the Parks!

#ExploreTheParksWithUs

"Pack Your Curiosity,
Explore Nature's Beauty!"

www.expeditionsineducation.org

Wildflowers of the Great Smoky Mountains

1. Flame Azalea (Rhododendron calendulaceum)

- Vibrant orange or red blooms
- Late spring to early summer
- Elevations: 3,500 to 5,000 feet
- References: NPS

2. Trillium (Trillium spp.)

- Three-petaled white or pink flowers
- Springtime blooms
- Found throughout the park
- References: NPS

3. Purple Fringed Orchid (Platanthera psycodes)

- Delicate, purple, fringed flowers
- Summer bloomers
- Wetlands and damp meadows
- References: <u>USFS</u>

4. Crested Dwarf Iris (Iris cristata)

- Blue-violet flowers with crested petals
- Early spring bloom
- Woodlands and moist slopes
- References: NPS

5. Catawba Rhododendron (Rhododendron catawbiense)

- Lavender-pink, bell-shaped flowers
- Late spring to early summer
- Elevations: 3,000 to 6,000 feet
- References: NPS

6. Fire Pink (Silene virginica)

- Bright red, star-shaped blooms
- Late spring to early summer
- Dry, rocky slopes and woodlands
- References: NPS

7. Cardinal Flower (Lobelia cardinalis)

- \circ Brilliant red, tubular flowers
- Late summer to early fall
- Stream banks and wet areas
- References: NPS

8. Indian Pink (Spigelia marilandica)

- · Unique, red and yellow tubular flowers
- Late spring to early summer
- o Rich, moist woods
- References: NPS

9. Bluets (Houstonia spp.)

- Tiny, blue or white flowers
- Springtime bloomers
- Open meadows and woodlands
- References: NPS

Nature Scavenger Hunt

Around Your Home:

- 1. A Pinecone: Search for a pinecone from a nearby tree.
- 2. **A Feather**: Look for a feather, big or small, from a bird or another winged creature.
- 3. A Smooth Rock: Find a rock that feels smooth to the touch.
- 4. A Leaf of a Specific Shape: Hunt for a leaf with an interesting shape, like heart-shaped or star-shaped.
- 5. A Bug: Carefully catch a bug (don't forget to release it afterward).
- 6. A Flower Petal: Collect a petal from a blooming flower.

Around Your School:

- 1. A Blade of Grass: Pick a blade of grass from the schoolyard.
- 2. A Stick Shaped Like a Letter: Find a stick that resembles a letter from the alphabet.
- 3. A Seed: Locate a seed, whether it's from a plant or tree.
- 4. A Cloud of a Specific Shape: Look up at the sky and identify a cloud that looks like an object or animal.
- 5. A Piece of Bark: Collect a small piece of tree bark from the ground.
- 6. **A Small Pinecone**: Find a smaller pinecone, different from the one you found at home.

Bonus Round:

- 1. A Four-Leaf Clover: If you're lucky, see if you can spot a four-leaf clover. They're rare!
- 2. **A Spider Web**: Be on the lookout for a spider web glistening in the sun.
- 3. A Fossil (or a rock that looks like one): If you have access to an area with exposed rocks, search for a fossil or a rock with interesting patterns.

The Great Smoky Mountains

Location:

- Situated on the border of North Carolina and Tennessee, USA.
- Part of the Appalachian Mountains.

Why Are They Great?

- Known for their misty, blue appearance, the result of water vapor from forests.
- Home to diverse plant and animal species, making it a UNESCO World Heritage Site.

Fun Facts:

- The Great Smoky Mountains are one of the oldest mountain ranges in the world.
- No entrance fee to explore the national park!

Wildlife:

- Bears: Black bears roam freely here, making it a popular spot for bear watching.
- Elk: Successfully reintroduced to the park in 2001.
- Over 19,000 documented species, including salamanders and fireflies.

Outdoor Activities:

- Hiking: Over 800 miles of trails, ranging from easy to strenuous.
- Camping: Many campgrounds for all levels of campers.
- Fishing: Enjoy trout fishing in its numerous streams.

Scenic Drives:

- Cades Cove Loop Road: Offers stunning views of wildlife and historic buildings.
- Newfound Gap Road: Crosses the Appalachian Trail with breathtaking vistas.

Cultural Heritage:

- Historic Buildings: See preserved log cabins and churches from early settlers.
- Cherokee History: Learn about the Native American Cherokee people's rich history.

Weather:

• Four distinct seasons: Spring blooms, lush summers, colorful falls, snowy winters.

Preservation:

• Protected by the National Park Service and managed by both North Carolina and Tennessee.

Remember:

- Respect wildlife by keeping a safe distance.
- Leave no trace take only photos, leave only footprints.
- Always follow park rules and regulations.

Visit and Explore:

• Whether you're into hiking, wildlife, or just enjoying nature's beauty, the Great Smoky Mountains have something for everyone.

Website: www.nps.gov/grsm

Nature Scavenger Hunt

- 1. Smooth pebble
- 2. Pinecone
- 3. Feather
- 4. Acorn
- 5. Three different-shaped leaves
- 6. Something red in color
- 7. A piece of tree bark
- 8. Something that makes a sound (like a bird singing)
- 9. Clover with four leaves (if you're lucky!)
- 10.A flower (identify and describe its color)
- 11.A piece of trash (to help keep nature clean)
- 12. Something fuzzy (like a caterpillar)
- 13.A rock that's shaped like a heart
- 14.A twig that looks like the letter "Y"
- 15.A place where you can see the sky through the trees
- 16. A tiny pebble that's a different color from the others
- 17. An ant or insect (observe it carefully)
- 18. Something you can smell (like a flower or pine needles)
- 19.A spot where you think an animal might have been (tracks or markings)
- 20.A cloud that looks like an animal or object (use your imagination!)