

BACKPACK THE PARKS

Expeditions in Education



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.

Backpack the Parks!



Instruction

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.

Rocky Mountain National Park

Activity 1: Rock Classification:

Materials:

- Assorted rocks
- Magnifying glasses
- Identification charts

Instructions:

- a. Take a rock from the collection.
- b. Use a magnifying glass to examine it closely.
- c. Try to classify the rock based on what you see and compare it to the identification chart.

Activity 2: Animal Tracks and Traces:

Materials:

- Animal track pictures
- Clay or play dough
- Toothpicks

Instructions:

- a. Look at pictures of animal tracks.
- b. Take some clay or playdough and make impressions of the tracks.
- c. Guess what kind of animal might have made each track.

Activity 3: Plant Exploration:

Materials:

- Plant identification guides
- Leaves
- Flowers
- Seeds

Instructions:

- a. Collect various plant specimens.
- b. Use the identification guides to identify and label the plants.
- c. Discuss the different places where these plants might grow.



Activity 4: Weather Journal:

Materials:

- Weather chart template
- Thermometer
- Rain gauge.

Instructions:

- a. Set up a weather station in the classroom.
- b. Every day, record the temperature, whether it rained or not, and what the weather was like.
- c. Create a journal to keep track of these observations.
- d. Compare your data to the Rocky Mountain National Park.

Activity 5: Leave No Trace Poster:

Materials:

- Art supplies
- Poster board

Instructions:

- a. Learn about Leave No Trace principles.
- b. Create a poster illustrating these principles using art supplies.
- c. Display your poster in the classroom.
- d. You can also create this digitally.

Rocky Mountain

National Park

Activity 6: Food Chain Game:

Materials:

- Pictures of park animals
- String
- Index cards

Instructions:

- a. Get assigned an animal from the park.
- b. Create a food chain by connecting with string and using index cards to show what each animal eats.

Activity 7: Miniature Ecosystems:

Materials:

- Clear plastic containers
- Soil
- Plants
- Small plastic animals.

Instructions:

- a. Make a miniature ecosystem in a container.
- b. Discuss what kind of area in the park it represents.

Activity 8: Stargazing:

Materials:

Star charts

Flashlights with red filters

Instructions:

- a. Learn about star charts and how to use them.
- b. Use red-filtered flashlights to practice stargazing indoors.

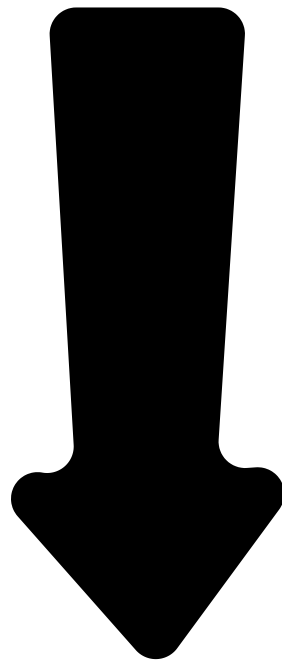
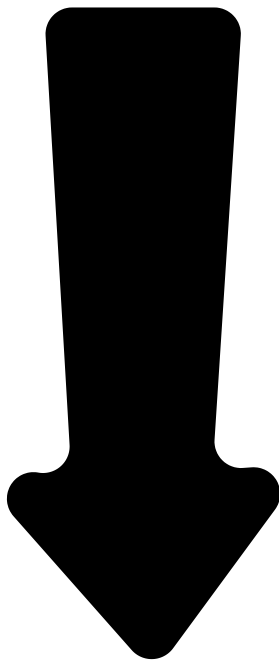


Activity Cards

Print on cardstock

Laminate

Put on rings



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BAG TAG BELOW!



**Rocky Mountain
National Park**

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#ExploreTheParksWithUs

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

www.expeditionsineducation.org

Rocky Mountain Animals Who Leave Tracks

1. **Elk** (*Cervus canadensis*)
2. **Mule Deer** (*Odocoileus hemionus*)
3. **Bighorn Sheep** (*Ovis canadensis*)
4. **Mountain Lion** (*Puma concolor*)
5. **Black Bear** (*Ursus americanus*)
6. **Coyote** (*Canis latrans*)
7. **Bobcat** (*Lynx rufus*)
8. **Red Fox** (*Vulpes vulpes*)
9. **Gray Wolf** (*Canis lupus*) - Rarely spotted but may leave tracks.
10. **Pine Marten** (*Martes americana*)
11. **Moose** (*Alces alces*)
12. **American Marten** (*Martes americana*)
13. **Beaver** (*Castor canadensis*)
14. **Raccoon** (*Procyon lotor*)
15. **Porcupine** (*Erethizon dorsatum*)
16. **Pika** (*Ochotona princeps*)
17. **American Badger** (*Taxidea taxus*)
18. **Golden-mantled Ground Squirrel**
(*Callospermophilus lateralis*)
19. **Cottontail Rabbit** (*Sylvilagus* sp.)
20. **Snowshoe Hare** (*Lepus americanus*)

Leave No Trace

Protecting Our Outdoor Spaces

1. Plan Ahead and Prepare

Research the area you'll visit.

Bring the right equipment.

Check weather forecasts.

Know local regulations.

2. Travel and Camp on Durable Surfaces

Stick to established trails.

Camp at designated sites.

Avoid trampling on fragile vegetation.

3. Dispose of Waste Properly

Pack out all trash.

Use established restroom facilities.

Bury human waste at least 200 feet from water sources.

4. Leave What You Find

Don't pick flowers or disturb wildlife.

Leave rocks, plants, and historical items as you found them.

5. Minimize Campfire Impact

Use a camp stove for cooking.

Use established fire rings if fires are permitted.

Keep fires small and burn only small sticks and twigs.

6. Respect Wildlife

Observe animals from a distance.

Don't feed them human food.

Store food securely to prevent wildlife encounters.

7. Be Considerate of Other Visitors

Keep noise levels down.

Yield the trail to others.

Share popular spots.

8. Educate Yourself and Others

Learn about the environment.

Share Leave No Trace principles with others.

Lead by example.

Rocky Mountain Plants

Common Name	Scientific Name	Description
Colorado Blue Columbine	<i>Aquilegia coerulea</i>	A striking blue-purple flower with delicate petals.
Rocky Mountain Ponderosa Pine	<i>Pinus ponderosa</i>	A tall evergreen tree with long needles and bark that smells like vanilla.
Indian Paintbrush	<i>Castilleja</i> spp.	Vibrant red, orange, or pink flowers resembling paintbrushes.
Alpine Forget-Me-Not	<i>Eritrichium</i> spp.	Small, blue flowers with five petals and fuzzy leaves.
Golden Banner	<i>Thermopsis montana</i>	Bright yellow, pea-like flowers on tall spikes.
Mountain Bluebell	<i>Mertensia</i> spp.	Bell-shaped blue flowers on drooping stems.
Bigtooth Maple	<i>Acer grandidentatum</i>	A small deciduous tree with lobed leaves and striking fall colors.
Englemann Spruce	<i>Picea engelmannii</i>	A coniferous tree with short needles and cone-shaped seed cones.
Western Sneezeweed	<i>Helenium autumnale</i>	Yellow, daisy-like flowers with dark centers.
Bearberry	<i>Arctostaphylos uva-ursi</i>	Low-growing evergreen with small, leathery leaves.
Mountain Thistle	<i>Cirsium scopulorum</i>	Spiky, purple thistle flowers atop tall stems.
Western Columbine	<i>Aquilegia elegantula</i>	Red and yellow flowers with long spurs.
Rocky Mountain Juniper	<i>Juniperus scopulorum</i>	A shrub or small tree with scale-like needles.
Showy Goldeneye	<i>Heliomeris multiflora</i>	Bright yellow flowers with dark centers.
Common Yarrow	<i>Achillea millefolium</i>	Clusters of white or pink flowers with fern-like leaves.
Aspen	<i>Populus tremuloides</i>	A deciduous tree with distinctive white bark and fluttering leaves.
Parry's Primrose	<i>Primula parryi</i>	Low-growing plant with pink to lavender flowers.

Rocky Mountain Rocks

Rock Type	Description	Characteristics/Uses
Granite	Igneous rock formed from cooling magma; coarse-grained	Often used in buildings and statues
Limestone	Sedimentary rock composed of calcium carbonate	Used in construction and as a base for roads
Sandstone	Sedimentary rock formed from sand grains cemented together	Often used in construction and as a building material
Shale	Sedimentary rock composed of fine clay and silt particles	Source of oil and natural gas
Schist	Metamorphic rock with medium to coarse grains	Used as decorative stone and for landscaping
Gneiss	Metamorphic rock with distinct layering and banding	Used in construction and landscaping
Quartzite	Metamorphic rock formed from sandstone	Resistant to weathering, used in construction
Conglomerate	Sedimentary rock with rounded pebbles and gravel	Often found in riverbeds and used as construction material
Basalt	Fine-grained igneous rock, often dark in color	Used for road construction and as a building material
Slate	Fine-grained metamorphic rock with cleavage planes	Used for roofing and flooring