

FAMILY FUN PACK



Are you ready for an adventure? Use the activities and supplies in this guide to explore a park with your family. Go geocaching, create nature sculptures, learn about Iowa's landforms and end your exploration with a Ninja Warrior course! When you're done, share your adventures using **#99Parks**

Then, make plans to visit another park in one of Iowa's 99 counties! Can you visit them all? Get the full list at www.traveliowa.com/99parks

PACKING LIST

Scavenger Hunts: Phone or GPS device, pencils (optional - clipboard)

Exploration: Plastic or cloth bags for each person, sidewalk chalk, clear plastic container or jar for each person (clear baby food containers or spice containers work great), magnifying glass, scissors, marshmallow, plastic spoon, rubber band or hair tie (optional - lamination, cardstock, or cardboard)

Art: Paper, crayons (optional - water, flour paste, salt)

Recipes: Peanuts, dried cranberries, dried banana chips or other dried fruit, M&Ms, pretzels, square cereal

Recommended books: *Cloud Country* by Bonny Becker and Noah Klocek; *Red Leaf*, *Yellow Leaf* by Lois Ehlert; any of Andy Goldsworthy's photo art books

Don't forget: Check the forecast, make an emergency plan and bring bug spray, sunscreen, hats and lots of water!



SENSORY SCAVENGER HUNT



LISTEN FOR
Birds Chirping

SMELL
Fresh Cut
Grass



FEEL
Pinecone



Moving Water



Rock



Wind
in the Trees

Campfire



Water

Soil



Leaves
on a Tree

LOOK FOR
Animal Tracks





Cloud

Butterfly



Bird Nest



Squirrel

Flower



Rotting Log

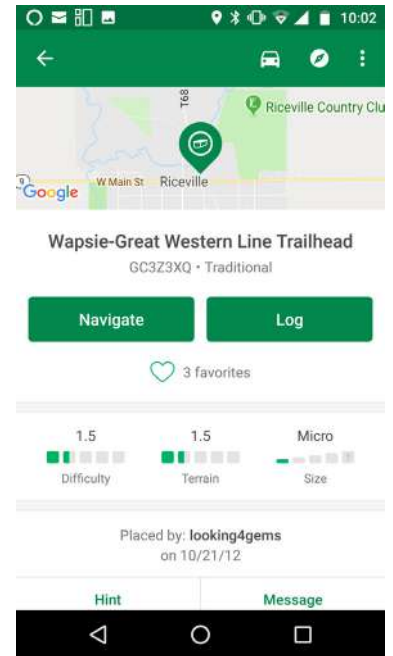


Insect

GEOCACHING

Part scavenger hunt, part hike, geocaching will catch the interest of adventurous older kids and adults. Use a GPS unit, such as your phone, to find hidden treasures. Join the millions of geocachers worldwide! Learn more at www.geocaching.com/play

1. Search for and download the FREE Geocaching app to your phone. Create an account and log in.
2. Look at a map of your area. Click on green geocaches. To see more details, click on the name of the cache. Pro tip: look for caches that are low difficulty and terrain. A “regular” sized cache is probably a small plastic container; they are easier to find than a “micro” which is likely a film canister or smaller. Micro caches probably only contain a log to sign and date. Regular caches usually contain a log as well as tradeable “swag.” Leave an item, trade an item!
3. Follow the coordinates to the general area and then start searching! Look for items out of place. Check in tree stumps. Search high and low.
4. Consider the season. Bug spray and long pants are important during the buggy, poison-ivy-prone months. Tall grasses make caches more challenging to find. If the cache proves too difficult, consider trying again in the fall or winter.



FAMILY PHOTO CHALLENGE

Have some photo fun with these challenges! Can you complete them all? Don't forget to post to social media using **#99Parks**



1. Take a selfie at your favorite spot in the park.
2. Photograph your reflection in a pond, river, puddle or pool.
3. Re-enact a famous work of art - *American Gothic*, anyone?
4. Use nature items to create the letters in your name.
5. Rainbow selfies! Capture a series of photos including nature items of every color of the rainbow.

NATURE SCULPTURES

1. Learn about artist Andy Goldsworthy by checking out one of his photo art books from the library or visiting www.redtedart.com/kids-get-arty-andy-goldsworthy
2. Gather nature objects such as leaves, grasses, stones, etc. to make a geometric sculpture. How do the variations in color and size impact the design?
3. If it is windy, spread paste on a flat surface and set objects in place. Paste can be made by mixing 1 part flour, 2 parts water and a pinch of salt. Stir until lumps are gone. Store in a cooler or refrigerator. It will keep a few days.
4. **Variations:** Use nature objects to create an animal or landscape.



LEAF RUBBINGS

1. Gather dry leaves and place them on a flat surface.
2. Place a sheet of thin paper on top of the leaf until you can see its shape.
3. Hold in place and color over the leaves.
4. **Variations:** Make collages on a single sheet of paper using a variety of leaves and colors or create animals or people by arranging leaves in the desired shape.

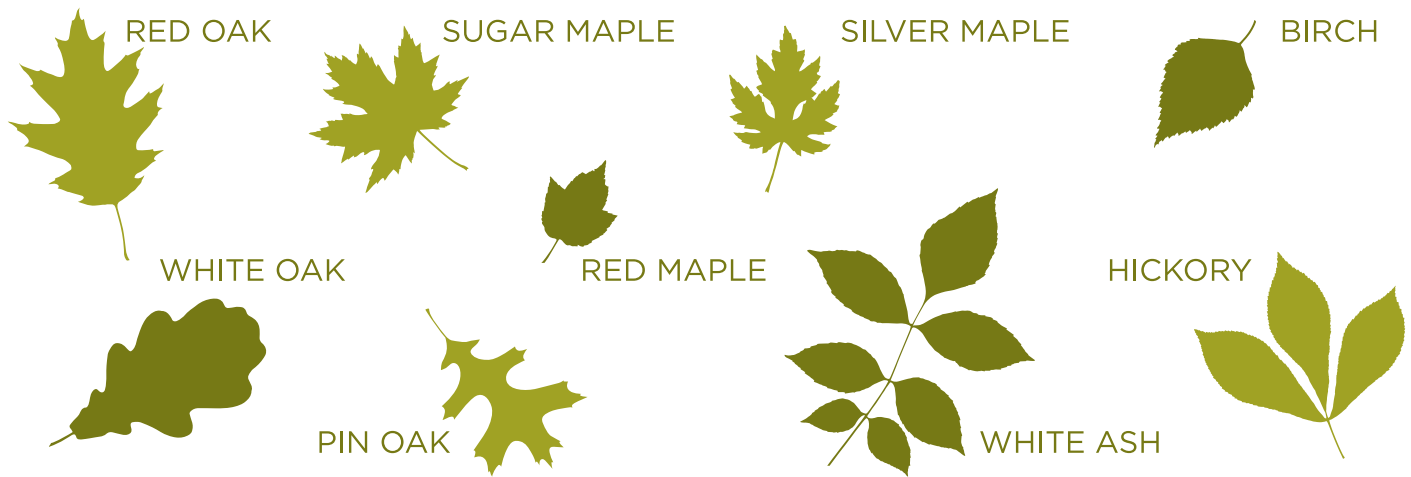
For photos and more information:

www.firstpalette.com/Craft_themes/Nature/Leaf_Rubbings/Leaf_Rubbings.html



LEAF TIC-TAC-TOE

1. Gather several sticks and five leaves from two different trees. Find sticks and leaves on the ground so no harm is done to the trees.
2. Create a tic-tac-toe board from the sticks. Use the leaves as X's and O's.



LEAF MATCHING

1. Gather 10 leaves from a variety of trees. Find leaves on the ground so no harm is done to the trees.
2. Object of the game: Walk around the park and find the tree that matches the leaves.
3. Sit in the shade and read *Red Leaf, Yellow Leaf* by Lois Ehlert. Learn more about tree identification at www.extension.iastate.edu/forestry/iowa_trees/tree_id.html

COLLECT, COUNT & SORT

1. Distribute collection bags. (If you don't have bags, use a "shirt basket" or your pockets.) Set a phone timer for five minutes, or more depending on the size of the area and age of kids. Collect rocks.
2. Sit in the shade to count and sort rocks.
3. On a paved surface, use sidewalk chalk to draw square "display boxes" for the collections. Decorate and creatively label the museum rock displays.
4. Cut out the award ribbons (available on page 11) and have each person nominate a rock. Awards could include Cleanest, Dirtiest, Smoothest, Most Jagged, Smallest, Largest, Most Sparkle.
5. **Variations:** Collect flowers, sticks or leaves (not from landscaping or protected areas, of course!).

BUG HUNT

1. Distribute bug boxes or jars. Spread out around the area looking for bugs. Check on flowers and flip over stones or logs. Encourage kids not to touch bugs (avoid bites and stings) but see if the bugs will freely walk into the bug boxes.
2. Examine the bugs with magnifying glasses. How many legs do they have? What color are they? How do they move?
3. Only keep bugs in the boxes for a few minutes. Then release them safely back to their habitat.
4. Learn more about bugs and insects at Iowa State University's Bug Guide at www.bugguide.net

MAKE A CLOUD VIEWER

1. Cut out the cloud viewer available on page 12. Adults - cut out the middle viewing hole. Laminating the cloud viewer, gluing it on cardboard or printing on cardstock makes it sturdier.
2. Hold up the cloud viewer at arm's length, look through the center and use the cloud photos to identify the cloud type. Remember not to look directly at the sun.
3. **Tip:** Keep the cloud viewer in your glove box to identify clouds as you are traveling from park to park.
4. Find some shade and read *Cloud Country* by Bonny Becker and Noah Klocek. Can you spot Gale and her friends with your cloud viewer?

Credit: Cloud viewer adapted from Neal Smith Wildlife Refuge's Project Bluestem

MARSHMALLOW LAUNCHER

Materials: Marshmallows, plastic spoon, 2 sticks, rubber band or hair tie

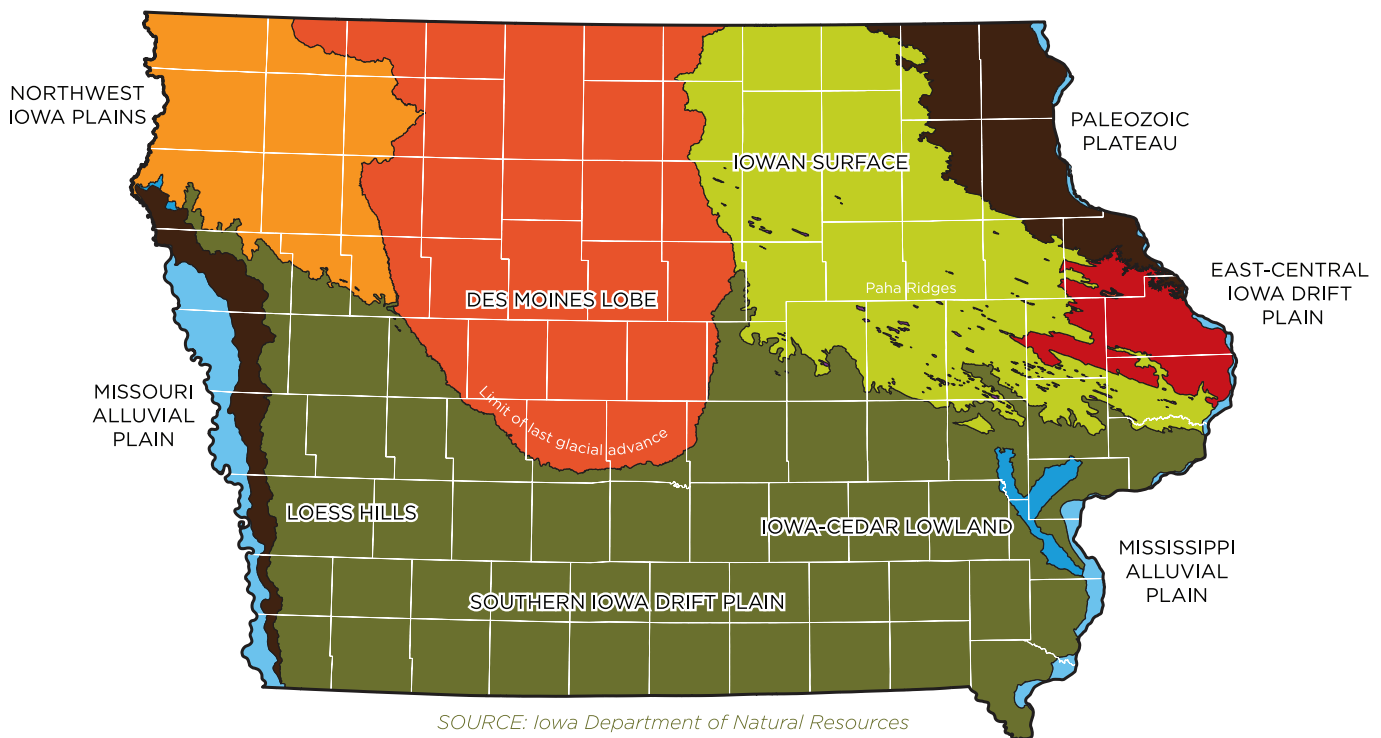
1. Find two sticks, each 8-12 inches long. One stick needs to be fairly straight and at least ½ inch thick. The other should be about 1 inch thick.
2. Use the rubber band to connect the end of the spoon to the straight stick. The spoon should be facing up.
3. Wedge the thicker stick between the straight stick and the spoon.
4. **To launch:** Place one hand on the straight stick to steady the launcher. Place marshmallow in the spoon. With one finger, push the spoon down and let go to launch. Why do some marshmallows launch farther than others? What adjustments could you make to your launcher to increase the distance the marshmallow flies?
5. **Safety tip:** Adults should help support and carefully supervise launchers.



IOWA'S GLACIER DETECTIVES

Clues on the land can tell us about the past. Large sheets of solid ice called glaciers covered most of Iowa thousands of years ago and shaped the landforms we see today. Parts of Iowa never covered by glaciers are called driftless areas. Are you standing in a glaciated or driftless area? Check off the characteristics you see.

LANDFORM REGIONS OF IOWA



Clues left by glaciers

- Level land - Since the glaciers left more than 10,000 years ago, erosion may have created gentle hills and valleys, especially near rivers and streams
- Glacial boulders - Giant rocks (up to the size of trucks!) were carried by glaciers as they moved south and dropped in Iowa as the glaciers melted
- Little exposed bedrock
- Excellent top soil created by glacial deposits, often farmland today
- **Note:** Clues will be more obvious in northern Iowa than southern Iowa due to the greater number of glaciers in northern Iowa.

Driftless area clues

- Deep, narrow valleys
- Rock outcroppings and ledges, not just near running water
- Heavily wooded

DETECTIVE CLUES FOR TWO OTHER UNIQUE LANDFORMS

Loess Hills Clues

- Steep ridges
- Prairie and wood covered slopes
- Loess deposits - Fine-grained particles left by glaciers were transported by the wind to create distinct bluffs

Clues for an Alluvial Plain

- Level terrain along valleys
- Sand dunes
- I'm standing near a large river

Learn more about Iowa's landforms at www.iihr.uiowa.edu/igs/landscape-features-of-iowa

NINJA WARRIOR COURSE

1. Kids design a Ninja Warrior-style course. Use a phone timer to see how long it takes to complete the challenges.
2. **Ideas to get your creativity started:** On a playground, get to the top and back using only (blue, wooden, plastic, etc) play equipment. On a trail, use logs as balance beams, leap across puddles and hop down trails. In a grassy area, bear crawl from one edge of the shade to the other, then frog hop back.

Adults: Keep this activity as safe as possible by supervising closely.

HIKE A TRAIL

Apply some bug spray and sunscreen and enjoy a family hike! Keep their curious minds focused with a trail song or game:

- **I Spy** - One person chooses an object and gives clues until others guess the object.
- **I'm going on a trip and bringing...** - The first player answers, "Apple," the next player says, "I'm going on a trip and bringing an apple and binoculars." The next player must add something beginning with "C" and so on through the alphabet. The answers will probably get sillier as you go.
- **"How Many" questions** - How many birds can we see? How many squirrels? How many streams have we crossed? How many steps until the log up ahead?
- **Step Counter** - Use an app or pedometer to track the steps of your hike.
- **Download a hike-tracking app!** - Older kids may enjoy enjoy mapping the hike and documenting with in-app photos. Plus, you can remember your favorite trails for your next visit.
- Don't forget to use **#99Parks**

TRAIL MIX

Perfect for kids to make. Take them to the store to find the ingredients.

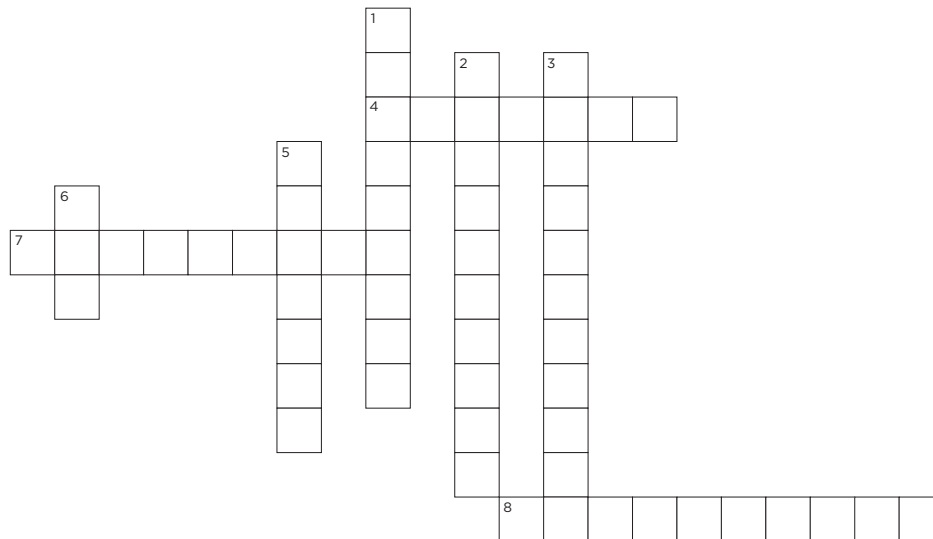
- ½ cup dried cranberries or other dried fruit
- 1 cup peanuts, sunflower seeds or popcorn
- 1 cup dried banana chips
- 1 cup M&M's
- 1 cup pretzels, optional - broken into smaller pieces
- 1 cup square cereal

Prepare a work area at kid height. Wash hands. Measure and pour all ingredients into a large bowl. Mix with hands. Scoop into individual reusable containers for a snack on the trail. Easily double the recipe to account for the size of your group - a great math lesson!



If you don't feel like packing snacks, check out our restaurant picks - one for each county! www.traveliowa.com/99restaurants

IOWA TRIVIA CROSSWORD PUZZLE



Across

- 4. This town is the county seat of Adams County
- 7. This town is the county seat of Greene County
- 8. How many counties are in Iowa? (two words)

Down

- 1. Iowa's smallest county (geographically)
- 2. A group of natural glacial lakes in northwestern Iowa. (two words)
- 3. This major river makes up Iowa's eastern border.
- 5. Iowa's largest county (geographically)
- 6. Which Iowa county has two county seats?

DID YOU KNOW...

As your group is exploring, ask these Iowa trivia questions!

- How many years ago did the first native people come to Iowa?
- During the last Ice Age, what covered most of Iowa?
- Native Americans created prehistoric earth mounds shaped like giant bears, snakes and other creatures. These mounds are found in many areas throughout the state, but what is the area with the largest concentration and best preserved mounds in Iowa called?
- What is Iowa's nickname?
- Iowa produces the most corn in the nation. What fuel is produced using corn?
- Who was the Iowa native elected 31st President of the United States?

Read more Iowa trivia at www.kids.nationalgeographic.com/explore/states/iowa

ANSWERS: 12,000 years ago, Glaciers, Effigy Mounds National Monument, The Hawkeye State, Ethanol, Herbert Hoover

99 PARKS

#THISISIOWA

Explore more of Iowa's county parks! Get ideas at www.traveliowa.com/99parks

Activities provided in partnership with Travel Iowa, Iowa's County Conservation System, Iowa Healthiest State Initiative and Next Step Adventure.





CUT ALONG THE BLUE DASHED LINES AROUND THE OUTSIDE EDGE AND REMOVE CENTER CIRCLE VIEWING AREA.

Low-Level Clouds
Below 6,000 ft.

Mid-Level Clouds
6,000 ft. - 20,000 ft.

High-Level Clouds
Above 20,000 ft.

CUMULUS

ALTOCUMULUS

CIRROCUMULUS

CIRROSTRATUS

ALTOSTRATUS

NIMBOSTRATUS

STRATOCUMULUS

VIEWING AREA

CIRRUS

STRATUS

CUMULONIMBUS

CLOUD VIEWER