

# NATURE EXPLORER AT-HOME ACTIVITY KIT

We are thrilled you are participating in Licking County Library's Tails & Tales Summer Library Program! Our goal with these kits is to get your family outside to explore and observe nature and all its amazing intricacies. Each activity includes a list of provided materials and a few things you will need from home. If you aren't a crafty person, not to worry! We have put together easy to follow tutorials on the Library's YouTube Channel so you can follow along with Library staff. Did we pique your curiosity about nature? Continue the adventure with our suggested book list to keep learning and reading all summer long! The fun doesn't stop here. Stop by any LCL location in July and pick-up an Animal Adaptation Activity Kit for more fun.







# ADVENTURE BOOK

## LIBRARY PROVIDED MATERIALS:

- Blank notebook
- Title for adventure book

#### MATERIALS NEEDED FROM HOME:

- Scissors
- Glue stick

Use this handy notebook to draw pictures of the animals you encounter along the way and make sure to list all the places your adventures have taken you. Did you see any animal tracks or animal habitats you would like to find again?

#### INSTRUCTIONS:

- 1. Cut out the title of your book
- 2. Glue the title to your book
- 3. Decorate your book with stickers, glitter and markers to make it your own creation

# **HOW DOES IT WORK?**

The next time you want to take a field trip outside, make sure you bring your handy dandy Adventure Book! Look at your surroundings with full concentration and observe for at least five minutes. Then sketch or write about your discoveries in your notebook. Sketches can be literal or abstract, all that matters is that the essence of the inspiration is recorded.

Try adding interesting things you find on your adventure like leaves, feathers or wildflowers to take home to dry and press. Write labels or descriptions of the items you find and look up their scientific names. Try making rubbings of the tree trunks or leaves that you find along the way.

There are some great benefits for exploring nature and recording what you find. It allows the child to slow down, breathe, relax and focus a busy mind. It can also help create a connection to their natural environment and promote creativity.





# **ADVENTURE BADGE**

## LIBRARY PROVIDED MATERIALS:

- Badge on cardstock
- Safety pin
- Printout of types of adventurers

#### **MATERIALS NEEDED FROM HOME:**

- Tape
- Glue stick
- Scissors

Let your imagination run wild! You could be a super sleuth on a hunt for animal tracks in your own back yard. Or pretend to be a famous explorer searching for the locally threatened spotted turtle. Just make sure you wear your badge with courage and have fun exploring!

#### INSTRUCTIONS:

- 1. Cut out a badge with scissors
- 2. Cut out and glue your choice of adventurer type onto the front of your badge
- 3. Tape the safety pin onto the back of your badge (make sure it's secure)

# **HOW DOES IT WORK?**

Pretending to be an explorer or a super animal sleuth is a great way to answer questions that a child might have. It can also be empowering and allow them to build confidence in their observation skills. Putting on a badge lets everyone know it's *Adventure Time*!

As caregivers, your role is to follow children's natural inclinations and enthusiasm. As you engage and involve your children in this activity, pay attention to what excites them and do your best to tailor the project to their interests. Finding out what inspires and engages a child can be magical!

When you are out and about, observe and talk about the squirrels, birds, worms, spiders, insects or other wild animals you find. Introduce vocabulary to describe how these animals look and move. Look at the furry grey squirrel climbing the tree! The bird soaring in the sky! The grasshopper jumping! Use your own body to run like a squirrel, soar like a bird and jump like a grasshopper. What other ways can you move your body?





# **BINOCULARS**

#### LIBRARY PROVIDED MATERIALS:

- Cardstock paper
- Yarn
- Mini compass

#### **MATERIALS NEEDED FROM HOME:**

- Tape, glue stick or stapler
- Hole punch

All great explorers need their own set of binoculars! Be on the lookout for animals hiding in trees or under a shrub. Being prepared is the most important thing when looking for animals *and* making sure to keep a safe distance!

#### INSTRUCTIONS:

- 1. Fold the cardstock in half—top to bottom
- 2. Cut along the fold; then roll each half into a cylinder shape to make two equally sized rolls
- 3. Tape/glue/staple the rolls together so they stay in the cylinder shape (Note: staples and tape will be quicker; glue will take time to dry)
- 4. Place rolled paper side-by-side and tape/glue/staple the rolls together so they resemble binoculars
- 5. Punch a hole at the top of the outside of each tube (if using glue, wait until it is dried)
- 6. Loop yarn end into hole and tie a knot. Repeat on other hole to create a neck strap

## **HOW DOES IT WORK?**

What child doesn't like to play pretend? Not only is pretend play an excellent way for children to develop their social, emotional and narrative skills, but it's also a fun way for them to explore and make sense of the world around them.

The key to taking a good pretend game to the next level is often found in the form of an accessory! A set of DIY binoculars and a compass to help you find your way are a necessity for getting into the zen-like mindset of bird watchers and animal behaviorists. Observing animals can be one of the most exciting and educational opportunities that a child can experience. These binoculars can be used in any season and almost anywhere you go, whether you're visiting a park, walking through your neighborhood or looking out a window.

Try to use your new binoculars to investigate small critters like worms, snails, pill bugs and ants. Observe where different animals live and make their homes. Look for critters in the dirt, under rocks, around plants and on sidewalks. What does it look like? Where did you find it? What is it doing there? These are all questions that can lead to more observations.





# BUTTERFLY FEEDER

#### LIBRARY PROVIDED MATERIALS:

- Pie tin
- Yarn
- Decorative beads

#### MATERIALS NEEDED FROM HOME:

- Rocks or sponges
- Hole punch
- Markers or paint (optional)

Butterfly watching can be a fun hobby and it is a lot like bird watching. All you need to do is go outside on a sunny day and bring your trusty binoculars. Remember to wear brightly colored clothes because this may help attract butterflies. Hang your Butterfly Feeder and wait and see if any butterflies come to feed. You can also visit different habitats, like backyards in new neighborhoods, parks, woods, meadows and wetlands to find all different shapes and sizes of butterflies.

## INSTRUCTIONS:

- 1. Poke four evenly spaced holes around the edge of the pie tin with the hole punch
- 2. Cut yarn into four pieces that are the same size
- 3. Thread yarn through the holes and tie a knot at the bottom
- 1. Add your beads to the yarn for decoration
- 2. Optional: Use paint/markers to make a creative statement on your feeder
- 3. Tie all four pieces of yarn together at the top and hang from a tree limb or shrub
- 1. Add homemade nectar mixture to the feeder to attract butterflies
- 2. Add stones or clean sponges to the bottom of the feeder—butterflies like to perch while they drink.

## **HOW DOES IT WORK?**

What can be more relaxing than watching butterflies fly? It's so fun to observe the different colors and sizes of each one. Use your Adventure Book to record how they move and perch between each flower. You can also sketch pictures of the different flowers they land on.

Did you know that butterflies are one of nature's pollinators? On a nice day, head outside and find a patch of flowers. What do you see? What insects or birds are pollinating or landing on the flower petals? Some flowering plants produce a sweet juice called "nectar." Nectar is food for many pollinators, including bees, ladybugs and hummingbirds. Plants depend on these animals to drink their nectar and then to spread their pollen to other plants. This is how the plants reproduce and grow new plants.

# **HOMEMADE NECTAR RECIPE:**

- 1-part sugar (example 1 tablespoon sugar)
- 4-parts water (example 4 tablespoons water)

Mix sugar with water until the sugar is dissolved. Fill your feeder with the sugar water and place outside. Extra sugar water can be stored in a refrigerator. Change nectar every other day.





# **ENGINEERING AND THE THREE LITTLE PIGS**

#### LIBRARY PROVIDED MATERIALS:

- 25 Popsicle sticks
- 25 Coffee straws
- 10 Index cards
- Piece of cardstock to simulate wolf's breath

#### MATERIALS NEEDED FROM HOME:

- Tape
- Paper
- Pencils

The story of the Three Little Pigs is not only a staple in the lives of most children, but it's also the perfect STEAM lesson. Use the materials provided to create three different houses. One made of straw (coffee straws), one made of sticks (popsicle sticks) and the last made of bricks (paper). Which one will withstand the huff and puff of the big bad wolf?

## INSTRUCTIONS:

- 1. Read or tell the story of the Three Little Pigs as a family
- 2. Brainstorm and sketch ideas for building "strong" houses to withstand the wolf's breath
- 3. Use the materials provided and tape to build three different houses—one of straw, one of popsicle sticks and one of index cards. Get creative with your designs. Experimentation is the best part of the scientific process!
- 4. Place the house in your "test zone" area and make sure the distance is the same for each house.
- 5. Simulate the wolf's breath by fanning each house with the cardstock.
- 6. If the house is still standing after 20 seconds, success!
- 7. Experiment with different ways to "huff and puff." Try a table top fan, take the houses outside on a windy day or use a hairdryer. What wind sources are the most powerful? How can you improve your house design?

## **HOW DOES IT WORK?**

Can you design and build a house that the big, bad wolf can't blow down? Read the Three Little Pigs together and ask yourself what do you think is needed to build a strong house. Consider linking this to different weather conditions. What would you need if you live in a windy climate, a hot climate, or a snowy or cold climate? Before you get started, remember to only use the materials listed above and all ideas should be considered with design.

Make observations while each house is being "blown down" by the big bad wolf. Ask these questions after the experiment and write down your answers:

- · What materials worked the best?
- What wind sources are the most powerful?
- Why do you think some materials were more effective than others?
- Was your house able to withstand the huffing and puffing of the big bad wolf?
- How could you improve your design?









# **CONTINUE YOUR EXPLORATION**

Want to learn even more? Borrow these books and become a nature ninja in no time at all!



National Geographic Kids Bird Guide of North America Jonathan Alderfer



**Bird Watch**Christie Matheson



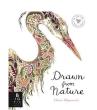
**Birds** Pamela Hickman



**Bugs in Danger** Mark Kurlansky



What Do You Do If You Work at the Zoo? Steve Jenkins



**Drawn from Nature** Helen Ahpornsiri



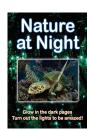
Let's Play Outdoors! Catherine Ard



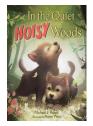
Hack Your Backyard Niki Ahrens



How to Find a Bird
Jennifer Ward



Nature at Night Lisa Regan



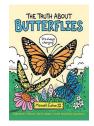
In the Quiet, Noisy Woods Michael J. Rosen



The Nature Girls Aki



Look Up!
Annette LeBlanc Cate



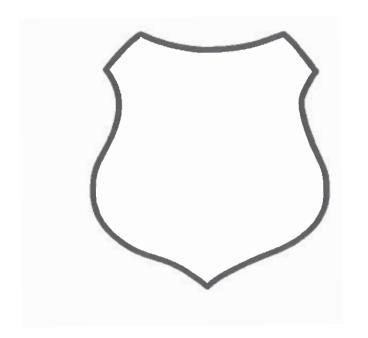
The Truth
About Butterflies
Maxwell Eaton III

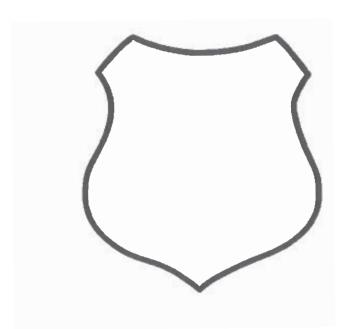


Winged Wonders
Meeg Pincus

We have so many titles on exploring nature and animals we couldn't add them all. Be sure to check your local library shelves to continue learning and reading!

Experiments in Nature 508.07 | Butterflies 595.78 | Bird Watching 598.07 | Outdoor Adventures 796 | Animals 590s





**EXPLORER** 

-----

**SLEUTH** 

-----

**GUIDE** 

**ADVENTURER** 

ADVENTURE BOOK **EXPLORER** 

**SLEUTH** 

**GUIDE** 

**ADVENTURER** 

ADVENTURE BOOK Park