



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at [www.projectexploration.org/stemathome](http://www.projectexploration.org/stemathome).

## In this activity, you will:

explore a bird's nest and learn how to build your own!



## Supplies Required:

- Natural items such as leaves, grass, twigs, mud, clay, branches
- 10 toothpicks
- 10 popsicle sticks
- Tape
- Glue
- Paper bag
- Paper

## Video

Follow along as Mama Built a Little Nest is read aloud: <https://tinyurl.com/yxkoc286>

## Overview

Bird nests come in all shapes and sizes. They can be in trees, near water, on beaches and in the snow. Birds use what is around them to build their nests, so they can be made from all different kinds of materials. They must build a nest that is strong and secure enough to hold their eggs and baby birds when they hatch. Some birds weave together grass and twigs to form a basket. Others might use binding materials, such as mud or even their own saliva to build or help support the nest. Birds in a cold climate, for example, might line their nests with insulating materials, such as grass, to help keep the eggs warm.



## Instructions

1. **Problem:** What do we want to solve? How can we build a sturdy nest? Look around your house, on the inside and the outside, to see what kind of materials a bird might use to build a nest. Collect as many materials as you can find in your paper bag.
2. **Solutions:** What are some ways to solve the problem? What shape will it be? How big will it be? How strong will it be?
3. **Model:** Build your design!  
Build your nest using the materials you have collected.
4. **Test:** Does your model work?  
Does the nest stay in one piece? Does it balance on a surface like a tree branch? Is it sturdy enough to hold an egg or baby bird?
5. **Reflect & Redesign:** Was your model successful? Does it need to be redesigned?

## Additional Resources

1. The local nature center would like to display a picture of your nest in their brochure. Draw a picture of the nest that you built. Add some eggs or baby birds to the nest.
2. What are nests made of? <https://tinyurl.com/y2wul8vc>
3. How can we help birds? <https://tinyurl.com/wglvq9n>

## Share It Out

**Share on social media:** Share a picture of your nest with your friends and family. Explain how birds make their own nests and encourage others to make a home for birds! Use the hashtags:

#BirdsNest  
#ProjectExploration  
#StemAtHome

For more activities like this one, go to [www.projectexploration.org/stemhome](http://www.projectexploration.org/stemhome). If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!



Call or text us for help: 312-772-6634

[www.projectexploration.org](http://www.projectexploration.org)