



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.

In this activity, you will:

Explore the world of architecture and design your own building using recycled materials.



Supplies Required:

- Tape
- Scissors
- Recycled materials of your choice:
 - Paper towel tubes, toilet paper tubes, cereal boxes or any cardboard boxes
- Straws
- Milk carton
- 1 pencil
- 1 or 2 sheets of paper

Video

Listen to the book, Iggy Peck Architect, being read aloud before beginning your activity: <https://tinyurl.com/y7su5jmh>
Find out more about architects: <https://tinyurl.com/yc4mo3cj>

Overview

Architecture is the science of the design of buildings or other structures. Some structures include houses, churches, office buildings, skyscrapers, and sports arenas to name a few. Architecture is also the profession of an architect. An architect has to study at an institution of higher education (university) to become an architect. Architecture can be about small designs, such as a garage, or large designs, such as a whole city. Architecture often overlaps with civil engineering, and architects and civil engineers often work together to design the structures. The architect does the actual designing and drawing before the actual structure is actually built.



Instructions

Kindergarten through 4th Graders

1. Listen to the story.
2. Think about how creative Iggy gets with building things!
3. Gather all of your recycled materials. Today you get to be the architect, using any of the recycled materials you find at home.
4. Thinking about what you would build if you could design a building or even a neighborhood--sketch your design on paper before you begin building.
5. Label what materials you would use on your sketch.
6. Using the recycled materials build the sketch you made use your tape and scissors to assemble your design.
7. Share your design with your family and tell them how you were an architect today!

5th through 8th Graders

1. Follow directions 1-4
2. Choose one of the following structures/buildings and try to build a model using recycled materials:
A New York City Building: <https://tinyurl.com/mx55qv7>

The Eiffel Tower: <https://tinyurl.com/y9y9jm4w>

A Frank Loyd Wright home located in Chicago: <https://tinyurl.com/ydhguamk>
6. Share your design with your family and share it on social media!

Additional Resources

1. Take virtual tours of amazing architecture around the world: <https://tinyurl.com/ybdhc9t5>
2. Learn about skyscrapers with this cool app: <https://tinybop.com/apps/skyscrapers>
3. Look at this cool architecture: <https://tinyurl.com/y6qm6fz8>

Share It Out

Share on social media: Take a picture of your finished design! Tag Chicago Architecture Center and show them your architectural skills! Share your picture on social media using the hashtags:

#ArchitectReadAlong
#ProjectExploration
#StemAtHome

Share via PE's website: Students who complete STEM@home activities and share what they learned with the PE team via our website will earn points which can be traded in for cash prizes at the Explore Store. Your project number is 118. Learn more at www.projectexploration.org/explore-store

Join PE's character contest!

Design a STEM character who will lead kids through activities and be featured on our website and in our STEMbooks. Cash prizes will be awarded to the top 3 finalists. Learn more at: www.projectexploration.org/character-contest.



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

www.projectexploration.org