Today we will be exploring architectural engineering by discussing the many facets of building things! We will discuss nature’s engineers and the things they build (birds and their nests), what our imagination has to do with building (what do you imagine a box can be?) and discussing the many people that go into creating the structures around us from bridges to buildings (engineers, architects, construction workers).

**Summary of Episode**

Jack (they/them) is an eight-year-old kid who loves dancing, drawing, and math. They want to be an engineer when they grow up! Jack joins the Page Flipper Club at Brooklyn Public Library and learns about a cool book about engineering from the Whoa Gizmo. Then, they get to interview Zak Kostra, a real architectural engineer who helped build the Fulton Street Subway Station in Manhattan! Afterward, Jack saves librarian Sheneatha’s craft kits from the river of glue, thanks to their quick thinking and use of an online library resource called Instructables!

**Recommended Clip from the Episode**

- Find and charge (if necessary) your speaker and the device from which you’ll play the Page Flippers snippet. You can play the clip during the craft time.
- The clip will appear as a “bonus” episode on the podcast feed (you can find it on Spotify, Apple Podcasts, Stitcher, RadioPublic, Google Podcasts, etc.) or you can preview the clip here: Page Flipper Bonus Clip - Engineer.mp3 (total time: 3:42)
Clip summary: Jack (they/them) figures out how to get Sheneatha’s craft kits out to the book mobile just in time! They create a catapult from popsicle sticks and glue, using a library resource!

Storytime Guide

1. Welcome Song: Bread and Butter Marmalade and Jam
   a. Bread and butter Marmalade and Jam Let’s say hello as quiet as we can (whisper: hello) ...loud as we can ...slow as we can ...fast as we can ...high as we can ...low as we can ...nice as we can
2. Page Flippers talking points
   - Today’s story time is all about building things!
   - This program is a companion to our new BPL podcast for kids. That podcast is called Page Flippers Take on the World, and it’s designed to teach kids ages 4 to 10 about the world of work, with lots of jokes and fun songs.
   - We’ll give out postcards at the end of the program with a QR code so you can listen at home.
3. Book: Someone Builds the Dream by Lisa Wheeler
4. Song: The Construction Worker Song
   a. This is the way we pound the nails, pound the nails, Pounds the nails This is the way we pound the nails so early in the morning. This is the way we saw the wood, saw the wood, saw the wood. This is the way we saw the wood so early in the morning. Other Verses: Stack the bricks, Stir the paint, Paint the wall
5. Book: Not a Box by Antoinette Portis
6. Movement Song: Zoom Zoom Zoom
   a. Zoom, zoom, zoom We’re going to the moon. Zoom, zoom, zoom We’re going to the moon. If you want to take a trip climb aboard my rocket ship. Zoom, zoom, zoom We’re going to the moon. In 5, 4, 3, 2, 1 Blast off!
7. Book: Bird Builds a nest by Martin Jenkins
8. Craft/Hands on Activity: Build a bird’s nest: https://preschooltoolkit.com/blog/bird-nest-preschool-fine-motor-craft/
9. Closing song: We clap goodbye like this
   a. We clap goodbye like this.... We stomp goodbye like this... We wave goodbye like this....
10. Resource share
    - Hand out Page Flipper postcards so families can listen at home.
    - Share this book list with families, all about architecture and engineering! You can even create book bundles from this list. https://www.bklynlibrary.org/search?booklist=572877

More, if you are inspired!

11. Grab and Go Kit ideas:
    a. The birds nest craft could be a grab and go kit as well (be sure to tell people it is not meant for birds)
b. Build your own fairy castle, dragon den, park, etc. (fill the bags with cardboard, construction paper, sticks, pom poms, paper towel rolls etc.)
c. A small booklet/zine filled prompts and lists of things to look for as kids explore their neighborhoods and the buildings, bridges, and parks around them. Could also add stickers, markers, and a pen for them to use to fill the booklet.