

Digi-Bridge sparks interest and passion in science, technology, engineering, arts, and math (STEAM) learning, ensuring that students have the opportunities and skills to succeed in a rapidly-changing world by fostering curiosity, creativity, exploration, persistence, and resilience.



Harvey B. Gantt Center  
for African-American Arts+Culture



We are proud to partner with Lowe's and The Harvey B. Gantt Center for African American Arts + Culture to provide this STEAMKit for you to explore projects inspired by the profiles of revolutionary men whose journeys have altered the history and culture of our country.

Visit the Digi-Bridge YouTube Channel for video instructions!



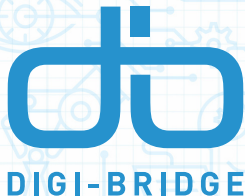
# MODEL HAND

Do you know how your muscles work? Let's take a look at the muscles in our hands: movements of the hand are mostly started by muscles in the forearm. Athletes like Muhammed Ali, Jackie Robinson, and Michael Jordan used the muscles in their hands to change the world of sports. Artists like Romare Beardon and Louis Armstrong also used the same muscles to create powerful art.

**Let's make a model hand to learn more!**

## YOU'LL NEED:

Foam Sheet	Straws
Glue Dots	Beads
Scissors	String
Popsicle Stick	



1. Use a pencil to trace your hand and wrist on the foam sheet and cut it out.



2. Cut small pieces of straws and place them on your hand to act as bones. HINT: Look at your hand and count the number of bones and joints in each finger! Use glue dots or tape to hold your straws in place.

3. Tie each piece of string to a bead. Then thread each string down through the straw pieces. These are your muscles and tendons! The bead should be at the top of the finger to hold the strings in place. Use a glue dot to attach your hand to a popsicle stick



**Can you make your hand move? What does it take to make your hand wave? What does this tell you about how your muscles work?**

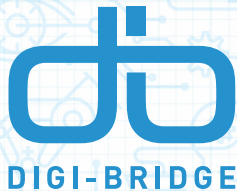
# TETRAHEDRON ARTWORK

Tetra-what? Mathematicians and architects like Benjamin Banneker and Paul Revere Williams used geometry to solve problems and design structures. A Tetrahedron is made of four equal-sided triangles: one is used as the base, and the other three are fitted to it and each other to make a pyramid.

**Let's make tetrahedron art to learn more!**

## YOU'LL NEED:

Paper template	Pencil
Colored Paper	Glue Dots
Scissors	Canvas



1. Cut out your tetrahedron template and trace onto colored paper. Cut along solid lines and fold along dotted lines. Tape or glue into pyramid shapes.



2. Make as many as you want! Decorate, stack, and arrange your tetrahedra.



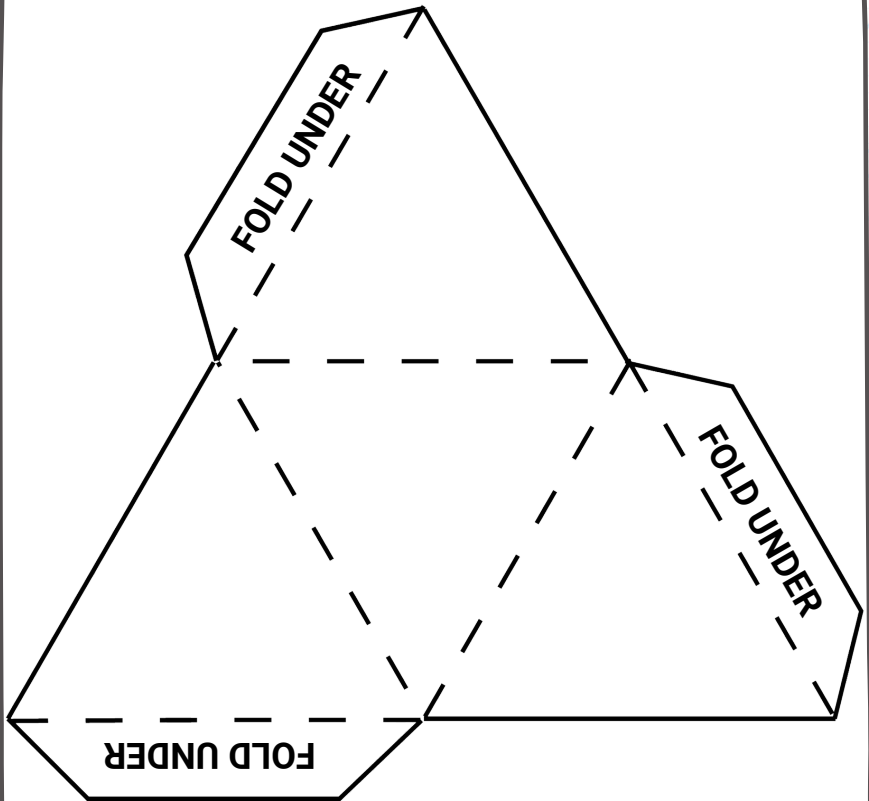
3. Play around with colors and space until you are happy with the design. Use glue dots to stick them onto the canvas and watercolors to create your art!

**How could you design a structure using only tetrahedra? What other things could you build with this shape?**

# TETRAHEDRON TEMPLATE

A tetrahedron is a three-dimensional shape with four corners and looks like a pyramid. It is the basis for a wide variety of geometry problems, and examples of tetrahedra can be seen in architecture, the arts, and even daily life.

**FUN FACT:** Tetrahedra is the plural of tetrahedron!



**CUT ALONG SOLID LINES**  
**FOLD ALONG DOTTED LINES**