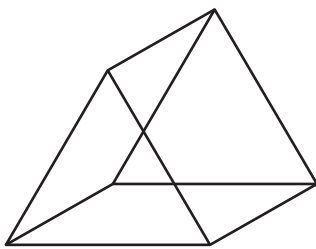




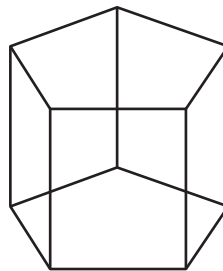
WHAT IS THIS?:

Don't let the title of this activity scare you off: making an arch out of trapezoidal paper prisms is way simpler than it sounds!

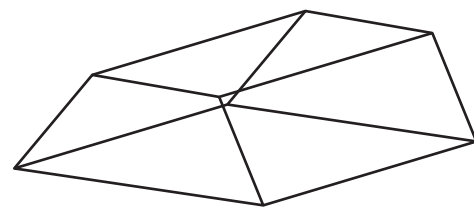
Arches are some of the most stable shapes around. Make an arch out of paper with some really cool “building blocks” called trapezoid prisms that you’ll create yourself. In the process, you’ll not only discover how to make an arch, you’ll also be introduced to the wonderful world of trapezoids and prisms.



Triangular Prism



Pentagonal Prism



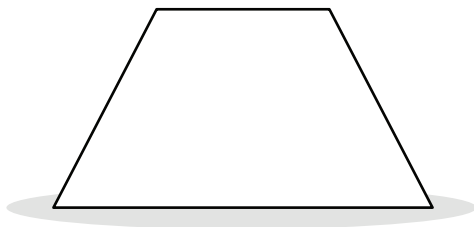
Trapezoidal Prism



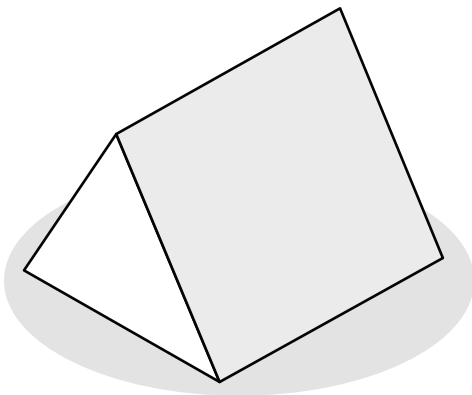
Arches made out of trapezoidal paper prisms



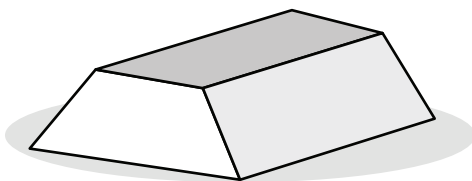
GOOD TO KNOW BEFORE MAKING THE TRAPEZOIDAL PRISM:



Trapezoids have four sides and look like triangles that have had their pointy top chopped off.



A prism is a solid shape that has identical ends, a minimum of three flat faces (to make a solid shape) and the same cross section all along its length. Its ends give it its name. So for example, a prism with three surfaces gives you ends that are triangular, so it's called a triangular prism.



A trapezoidal prism has, you guessed it, trapezoidal-shaped ends. (example-but remove the numbers



Arches made out of trapezoidal paper prisms

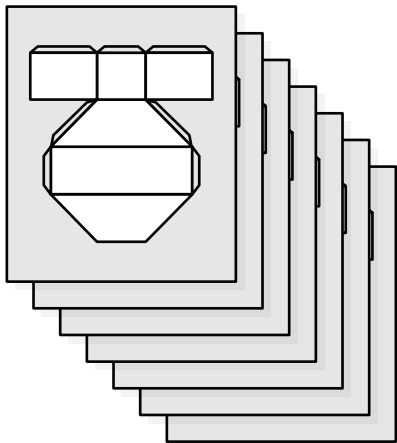


WHAT YOU'LL NEED:

- Trapezoidal prism template
(see last page of this PDF)
- Tape
- Scissors
- Paper or light cardboard



WHAT YOU DO:



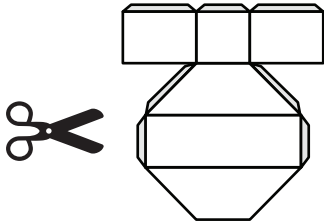
STEP ONE:

Make seven copies of the trapezoidal prism pattern *that you can find on the last page of this PDF.*

This pattern has little extra surfaces that allow you to make your shape “hold together”. This kind of paper pattern is called a net

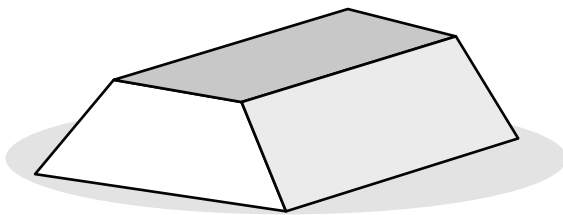


Arches made out of trapezoidal paper prisms



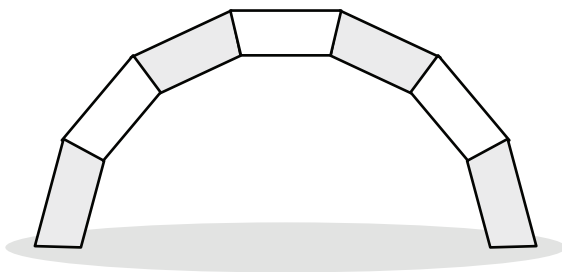
STEP TWO:

Cut the seven nets out with your scissors.



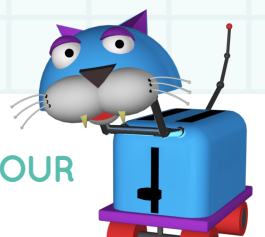
STEP THREE:

Fold the nets into prisms and use tape on the edges to secure them. Take note of how many sides the prism has.



STEP FOUR:

Assemble the prisms to make your own arch!



Trapezoidal Prism Template

(print this!)

