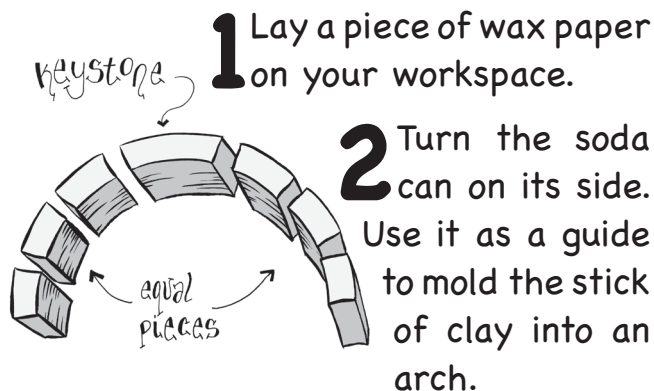


Make a Keystone Puzzle

How does an arch stay up? It's because of the keystone. A keystone is a specially shaped stone at the top of the arch that is the "key" to an arch.



1 Lay a piece of wax paper on your workspace.

2 Turn the soda can on its side. Use it as a guide to mold the stick of clay into an arch.

3 After your arch is formed, slide the can out from underneath it.

4 Lay the arch down on the wax paper. Use the knife to cut a "keystone" out of the top of the arch.

5 Next, cut the rest of the arch into six, equal pieces. When you're done, you should have one keystone and six supporting pieces (three for each side of the arch).

6 Let the clay pieces harden. Make sure they aren't touching as they dry.

7 Once the clay pieces are hard, see if you can put them together to build an arch. You can use the soda can to support your arch until you add the keystone. If you'd like, you can also ask a friend to help you hold the pieces.

How hard is it to put your keystone puzzle together? How important is the keystone? Let a friend or family member try to put the puzzle together.

Supplies

wax paper

soda can, either opened and empty or closed and full

1 stick of air-hardening clay, any color

knife (if you use a sharp knife, be sure to ask an adult for help)