Arches are everywhere. From ancient Roman ruins to modern bridges, arches shape the built world. They take many forms and are constructed out of many different materials. Arches can even be made out of take-out containers, so this is your cue to head to your favorite restaurant in the name of education.

In this simple activity, your budding architects will build their own arches and then test them for strength. They’ll work up an appetite with all of their heavy lifting, so they’ll be ready to dig into all of that take-out food when they’re done.

GATHER THIS:
• Take-Out food boxes
• Tape

THEN DO THIS:
1. Try creating an arch out of the shaped take-out boxes without using tape.
2. Try using tape to keep pieces of the arch from falling while you complete it.
3. Try making multiple arches and putting something on top of them.

ASK THIS:
• What makes an arch strong?
• What does an arch need for it to be strong?
• How many boxes make a stable arch?

WHAT IS HAPPENING?
The take-out food boxes taper toward the bottom, so they easily create arched shapes. You can also build straight up by stacking the boxes alternating between forward and backward facing.

WHAT THIS TEACHES:
Skills: Motor skills, observation
Themes: Geometry, physics, gravity