Ancient Greek Architecture

1. Ask your child to stand on a single paper cup. What happens?
2. Now explain we will build a structure that allows us to stand on the cups without breaking them – because it distributes your weight across many cups
3. Place 7 cups close together on the ground in this pattern:

4. Place one of the cardboard circles on top of the cups, centering the cups under the circle
5. Repeat steps 3 & 4 until you have three layers
6. Help your child carefully step on the top cardboard layer. The structure should hold their weight!

The Science

The ancient Greeks (and many other cultures still) used the post and lintel system because when you put a top (lintel) on several columns (posts), it can bear much more weight than any of the columns could individually...even if you added them up. Look at pictures of the Parthenon and other 2000+ year old temples built for the gods and goddesses of ancient Greece.
Older kids could also be challenged to make a building as tall as possible while still maintaining a minimum support weight (for example, How high can you make a tower that still supports 30 pounds?)!