

BUILD:

Index Card Castles

CHALLENGE: Create a castle only using index cards, without scissors or tape. Folding, tearing or crumpling your cards is allowed!

BIG IDEA: If you carefully look at buildings in your neighborhood, nearest city, even ancient structures, you will notice that they are made of a series of shapes. The shape of a structure affects how strong it is. Rectangles, arches, and triangles are the most common shapes used to build big, strong structures

Materials:

Index cards

Flat surface to work on

INSTRUCTIONS:

Work through as many of the tasks below to test out your ideas about the best shapes and methods needed to make an index card castle.

Task 1:

Build a castle that is at least 3 stories high

Task 2:

Build a new castle, but this time use a different shape for your base than before. Try out triangles, squares, and circles. Which one works best?

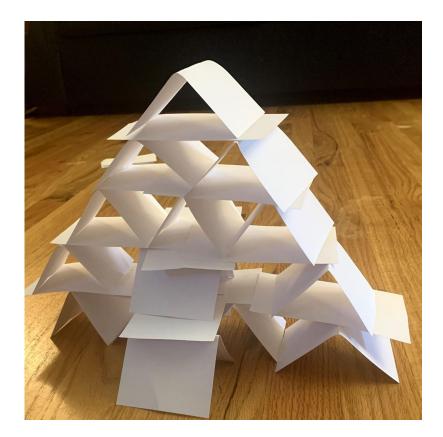
Task 3:

Use a timer to see how fast you can construct a tower. Invite someone to compete against you!









Want to know more?:

<u>www.tinyurl.com/STLtriangle</u> - Learn about why engineers use triangles. <u>www.tinyurl.com/STLarchitect</u> - *Architect Adventure* with Crash Course Kids

WE WANT TO SEE & SHARE YOUR CREATIONS!

Send us a picture or video by June 15, 2020 and be entered into a drawing for a gift card! Three ways to share:

- 1. Tweet us using the hashtag #aBitofSTEM
- 2. Text us at 314-285-9663
- Use this google form and we'll show off your creation. <u>Submit Here</u> (tinyurl.com/STLsubmit)

For more challenges visit: **STEMchallenges.wustl.edu**







