

PBS Media Highlights: Science of Structures

Educational science videos for your classroom

ABOUT THIS GUIDE

View these videos to discover the various shapes that are used to make strong structures.

GRADE K-3

PHYSICAL SCIENCE

VIDEOS &
INTERACTIVES from
pbslearningmedia.org

K-12 SCIENCE FRAMEWORK

DISCIPLINARY CORE IDEAS

PS 2: Motion & Stability:
Forces and Interactions

MEDIA and the CA COMMON CORE STATE STANDARDS

MEDIA VIEWING TIPS

K-3 Reading Standards for
Informational Text

Key Ideas & Details:

While watching the video ask and answer such questions as who, what, where, when, why and how to check for understanding key details in text.

Integration of Knowledge and Ideas:

After watching two videos, describe the connection between two scientific ideas or concepts.



FINDING THE STRONGEST SHAPE

In this video segment, members of the ZOOM cast experiment by bending and folding sheets of paper into various shapes to see which shape will support the weight of a heavy book.



COLUMNS: HILLARY'S NEIGHBORHOOD

Hyenas will work together to catch their next meal and spend time spotting out the weakest of the herd of the prey to attack.



SHAPES THAT MAKE STRUCTURES STRONG

Students explore the various shapes engineers choose to make structures strong -- in particular, triangles, arches, and domes.



INVESTIGATING A SUSPENSION BRIDGE

In this video segment adapted from ZOOM, the cast builds a suspension bridge from a couple of chairs, some cardboard, and rope.



IT'S COOL TO BE A CIVIL ENGINEER

Who decides how massive structures like skyscrapers are made? This video segment adapted from *Thinking Big, Building Small* showcases the job of a civil engineer.