

# STACKFORMS

## Full Day Workshop



### *How does this Activity Work?*

Most students don't have any trouble finding the volume of a cylinder, but can they find the volume of an elephant? This activity challenges students to create a 3-dimensional object from 2-D pieces of cardboard and find the volume of their animal or shape.

Students will work in pairs to choose their favorite animal from a list of options the week before the workshop. The workshop will begin with them looking at pieces of their animal and hypothesizing the final volume. Next students will construct their shape using only glue and try to find it's volume.

As a class we will do a water displacement experiment to determine the approximate volume of the animals. This will allow students to have the 'answer' and calculate the percent error of their own calculations.

Each group will present their solution *and* their work and reasoning and the rest of the class will vote on which animal's volume was best found as well as creative prizes.

## HANDS ON STEAM!

Students will work collaboratively to create their own stackform and explore the volume of an irregular object!

This activity is designed to be done in a full day with students deciding what object they want to use BEFORE hand.

### Perfect for 5-8

Students need to already know how to find volume of simple shapes for this activity.

### Interdisciplinary Skills

Math: Volume!

Art: Painting, decorating and constructing the object

Technology: Laser Cut stacks and Softwares



**Major Skill:** Volume of 3D Shapes

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