

THINK-ABOUT-IT THURSDAY

TODAY'S CHALLENGE: 3D STRUCTURE MODEL

AGE GROUP: ALL AGES!

CHALLENGE

Think about a bridge, tower, or building in your community. Using the materials you have chosen, **build a 3 Dimensional model** of the structure. Look closely at the **shape of the structure** and use your materials to recreate it!

MATERIALS

Use what you have, but here are some possibilities:

- toothpicks & marshmallows
- clay/mud & sticks
- play dough & popsicle sticks
- index cards & tape
- newspaper & tape
- toilet paper rolls & glue
- recycled cardboard & tape
- anything you have available
- Also: ruler or measuring tape, paper, pencil, marker/crayon

THINK ABOUT IT

- What parts of your structure **seem sturdy** and which parts **need to be reinforced**?
- If you used a different combination of materials, how might this **change your structure's stability**?
- Why do you think the architects chose this **style** for the structure?

SHARE YOUR PROJECTS WITH US:
#OregonSTEMWeek



ENGINEERING DESIGN PROCESS

Use the Engineering Design Process to build your 3D structure model.

- **Define**-What needs to be accomplished and what tools or materials do you have available? Which structure from your community will you try to build a model of?
- **Brainstorm**- What are your ideas for building your structure?
- **Plan**- Draw and discuss your design.
- **Make it and Test it!** How did it go? Did you meet the challenge? Can you improve your design? How is your structure similar/different from the real one?
- **Improve**- Make your design better by repeating the Engineering Design process again!

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