



3D PRINTING TECHNOLOGY

PROJECT DESCRIPTION

In this session students will learn what a 3D printer is, how it works and the advances that are being made in medicine using 3D printers. Students will use a fun 3D printable template of an image that can be folded into a useful 3D object like a mask, pencil holder, or hat. This activity is designed to teach 3D technology without the 3D printer.

OBJECTIVES

- Discover 3D printing technology
- Learn what a 3D printer is, how it works and what kind of awesome things you can do with it.
- Explore 3D shapes using themed printable templates that can be folded it into a 3D object.

ENGAGE

Get the kids fired up! Talk about 3D printing technology, define? Give examples? Have you ever used a 3D printer? If so, have the students to share their experience. Click here to show [video](https://youtu.be/Llgko_GpXbl): https://youtu.be/Llgko_GpXbl*. The video is a colorful animated explanation that defines 3D Printing and how they work.

INSTRUCTIONAL SEQUENCE

- Step 1 Select Template.
- Step 2 Carefully cut out the template.
- Step 3 Follow the instructions for applicable template.

ADAPTATIONS

- If time allows:
- Allow for kids to build their creativity skills and customize their project. i.e. add color, glitter, buttons, or whatever materials that might be available.
 - Have kids to try to design their own 3D template.



MATERIALS

- 3D Templates
- Scissors
- Glue stick
- Tape
- Ribbon

PRE-REQUISITES

- Basic art skills, i.e. use of scissors, cutting inside of lines, etc.

TECHNOLOGY REQUIRED

Computers with high speed internet, smart board or projector to show videos.

PROJECT BUILD

3D Options: Mask, Box. Pencil Holder



4 C's EXPLORED

- Critical Thinking
- Creativity

NOTES TO NOTE:

End project 15 minutes prior to dismissal. Give each student a W.D.Y.D. today sheet and complete the sheet as a group. Make sure each child has their project (if applicable) and the W.D.Y.D. sheet to take home.)

W.D.Y.D.

(WHAT DID YOU DO TODAY SHEET)

SESSION: 3D PRINTING TECHNOLOGY



STEM/STEAM AREA THAT I EXPLORED TODAY

STEM: 3D Printing

TODAY'S PROJECT?

Designed a 3D Model

WHAT I LEARNED?

MATERIALS I USED

- 3D Templates
- Scissors
- Glue stick
- Tape
- Ribbon

PROJECT BUILD
