PODAR INTERNATIONAL SCHOOL

MANGALORE

Notification – 3D Designing and Printing Competition

Ref No: PIS/ACT/SEAT/2026-27/51

Dear Parents,

Greetings of the day!

We are pleased to inform you that our school will be conducting an **intra-school 3D Designing and Printing Competition** for Grade 5-8 students during the academic year 2026–27.

The competition aims to encourage students to explore their creativity, develop innovative ideas, and enhance their 3D designing skills using Tinkercad.

The competition structure, guidelines, and themes are explained in detail in the attached document.

We encourage all students (teamwise) to participate enthusiastically and showcase their creativity and imagination.

Satyashree

Incharge Teacher

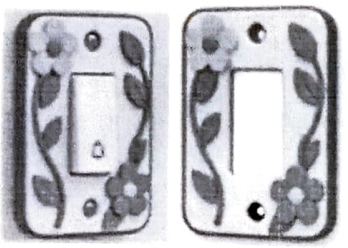
13/11/25

Principal

Themes for 3D Designing and Printing Competition (2026-27) Grade 5

Themes and designs

Round 1: Theme - Utility (Select any one):

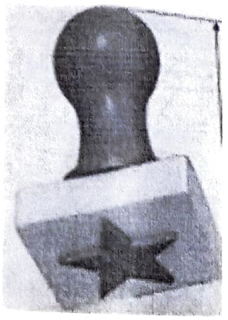
	Grade Objects to design (Select any one)	Guidelines for the design in Tinkercad
	1. Decorative casing for doorbell 	1. Design a rectangular doorbell case using basic 3D shapes. 2. Use the hole and group features to create a space for the switch. 3. Create a mounting hole to attach the case to a wall. 4. Use align and resize tools to position the shapes neatly.
	2. Key holder 	1. Design the key holder using basic 3D shapes. 2. Use the hole and group features to create key hooks or hanging slots. 3. Create two mounting holes to attach the keyholder to a wall. 4. Use align and resize tools to position the shapes neatly.

Note: Each team must submit their 3D designs in STL file format before 21/11/26

Themes for 3D Designing and Printing Competition (2026-27) Grade 6

Themes and designs

Round 1: Theme - Utility (Select any one):

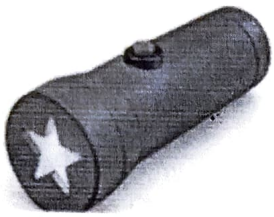
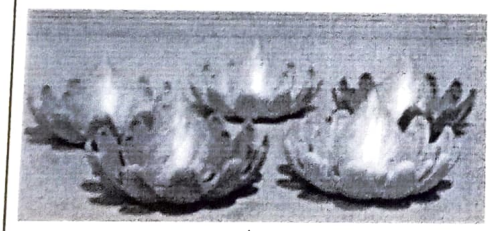
1. Stamp with a handle 	1. Design a stamp with a handle using basic 3D shapes. 2. Design a sturdy handle and a flat stamping surface. 3. Use the text, align and group features to create a raised letter, number or simple symbol on the stamping surface. 4. Use the ruler tool for accurate measurements to ensure proper alignment and a sturdy design.
2. Stackable storage containers 	1. Design three containers of different sizes that can be stacked using basic shapes. 2. Use the text, align and group features to create patterns to the outer surfaces of the containers. 3. Use the ruler, align and group tools to ensure accurate dimensions and proper fitting.

Note: Each team must submit their 3D designs in STL file format before 21/11/26

Themes for 3D Designing and Printing Competition (2026-27) Grade 7

Themes and designs

Round 1: Theme - Utility (Select any one):

1. Shape projector torch 	1. Design a torch body and head using basic shapes.. 2. Design one star-shaped cut-out on the front cover. 3. Use the hole and group features to create openings electronic components inside the torch. 4. Create a suitable opening for the push button so it can be pressed easily. 5. Provide a suitable position for the RGB LED behind the star-shaped cut-out. 6. Use the ruler tool for accurate measurements to ensure a proper fit.
2. Decorative lights 	1. Design an outer structure inspired by traditional Diwali patterns using basic shapes. 2. Create cut-out patterns, such as stars, flowers, diyas or geometric shapes, on the sides to allow light to shine through. 3. Use the hole and group features to create openings electronic components. 4. Use the ruler tool for accurate measurements to ensure a proper fit.

Note: Each team must submit their 3D designs in STL file format before 21/11/26

Themes for 3D Designing and Printing Competition (2026-27) Grade 8

Themes and designs

Round 1: Theme - Utility (Select any one):

1. Personalised interlocking name tags 	1. Design interlocking name tag pieces that fit together to form a complete name, word or meaningful pattern. 2. Design a hole for a keyring attachment. 3. Include at least 5 different shapes. 4. Use the ruler tool for accurate measurements to ensure a proper fit.
2. Stencil for symmetrical rangoli designs 	1. Design a stencil with a symmetrical rangoli pattern using geometric shapes, flowers, leaves or traditional motifs. 2. Use the hole and group features to create cut-outs that allow the rangoli design to be traced onto a surface. 3. Ensure that the stencil is flat, sturdy and easy to hold while creating the rangoli pattern. 4. Use the ruler tool for accurate measurements.

Note: Each team must submit their 3D designs in STL file format before 21/11/26