

# Dodecahedral Calendar

A **regular polygon** is a 2D shape all of whose sides and angles are equal. Equilateral triangles (3 sides,  $60^\circ$  angles) and squares (4 sides,  $90^\circ$  angles) are the simplest examples. The frames of the months in this calendar are regular pentagons.

A **Platonic solid** is a convex 3D shape where each face is the same regular polygon and the same number of faces meet at each corner. A cube is a Platonic solid with 6 square faces. Our calendar is a **dodecahedron**, a Platonic solid with 12 pentagonal faces.

## Instructions:

- ✂ Cut along
- ∟ Crease along
- Stick white flaps appropriately



**Science at the Sabha 2019**



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The IMSc logo has three interlocking golden-ratio rectangles (in saffron, white and green) arranged in perpendicular planes. The 12 corners of these rectangles form an icosahedron (outlined in grey), a Platonic solid with 20 triangular faces.

The centres of these triangles are the corners of another Platonic solid, the dodecahedron, like the one you can make with this sheet.

These solids are found in nature. For example, viruses carry their genetic material in protein shells called capsids. Some capsids are icosahedral in shape. These icosahedra could be as small as ten-thousandth of a millimetre across!

#SatS2019  
#dodecahedral

"The pursuit of science is at its best when it is a part of a way of life."