

Geometry — Exploring 2D and 3D Shape Relationships

Base Sheet

Activity Sheet

The child explores the relationship between 2D shapes and 3D solids, discovering that 3D shapes are made of 2D faces. By tracing the faces of geometric solids, the child connects flat shapes to solid forms.

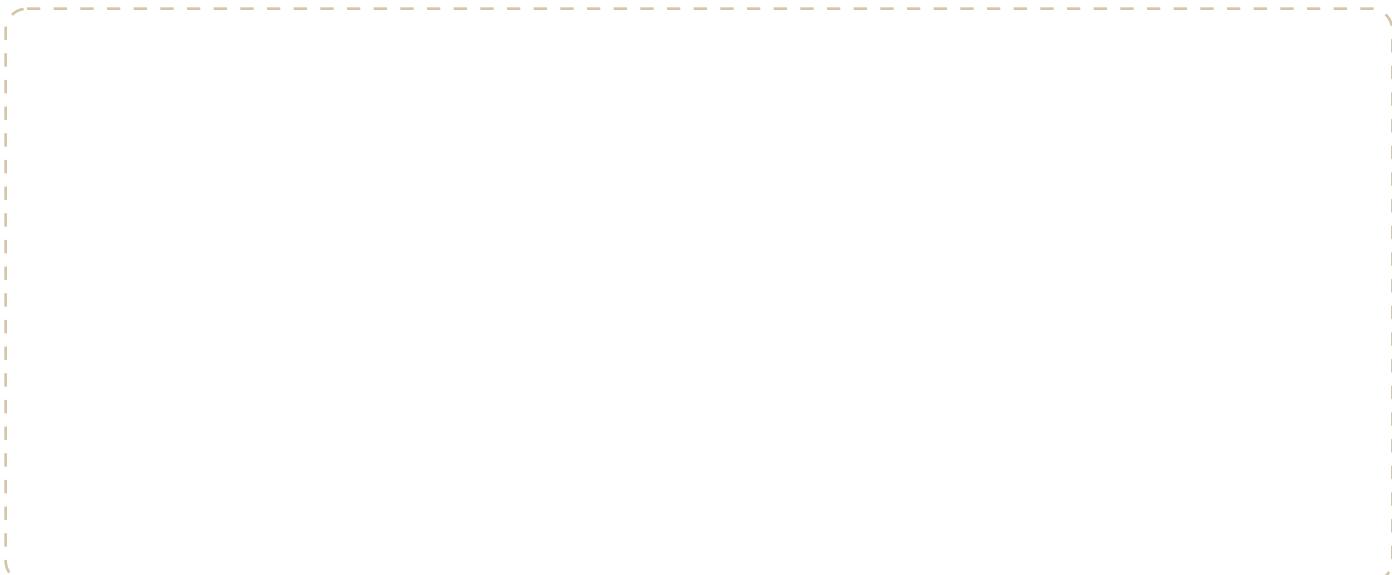
What You Need:

- Geometric solids (cube, cylinder, triangular prism, square pyramid, rectangular prism)
- Drawing paper
- Pencil
- Colored pencils
- Chart paper

Steps:

1. Review: place the geometric solids and the geometric cabinet insets on the work mat.
2. Pick up the cube. 'What shape is each face?' Trace one face on paper — it is a square!
3. A cube is made of 6 squares! Let us count: top, bottom, front, back, left, right.'
4. Trace the faces of other solids: cylinder (circles on the ends), triangular prism (triangles and rectangles).
5. Can you match each solid to the flat shapes that make it?
6. Child traces faces of 3-4 solids and labels the 2D shapes.
7. Build a chart: 3D Shape | 2D Faces | How Many.
8. Extension: 'Can you figure out how many faces a pyramid has?'

Work Space:



Montessori Homeschool • Print on US Letter (8.5 x 11") • Activity sheet — print on standard paper