

# Dome Home

## Grade Levels

Elementary and up

## Materials

Stiff piece of paper or file folder, sticky tape, triangle pattern (next page)

Most of today's houses are rectangular in shape with sharply angled roofs. In 1951, Buckminster Fuller, a college professor, developed a way to use triangles to construct an unusual half-ball shaped building called a geodesic dome. It has many advantages over flat-sided structures: beauty, strength (no internal support columns are needed), and a shape that encloses the greatest amount of space with the least amount of material. It is also the strongest, lightest and most efficient building yet devised.

You can make a mini dome home with these 15 triangles and some sticky tape. Carefully cut out all fifteen triangles from the pattern. Then tape five triangles together in this pattern. (See pattern next page.) Tape edges "a" and "b" together to form the dome roof.

Tape 10 triangles together in this pattern. (See pattern next page.) Tape end "c" to "d" to form the wall of the dome. To finish, tape the roof on top of the wall.

Test the strength of your dome by pressing down on the top!

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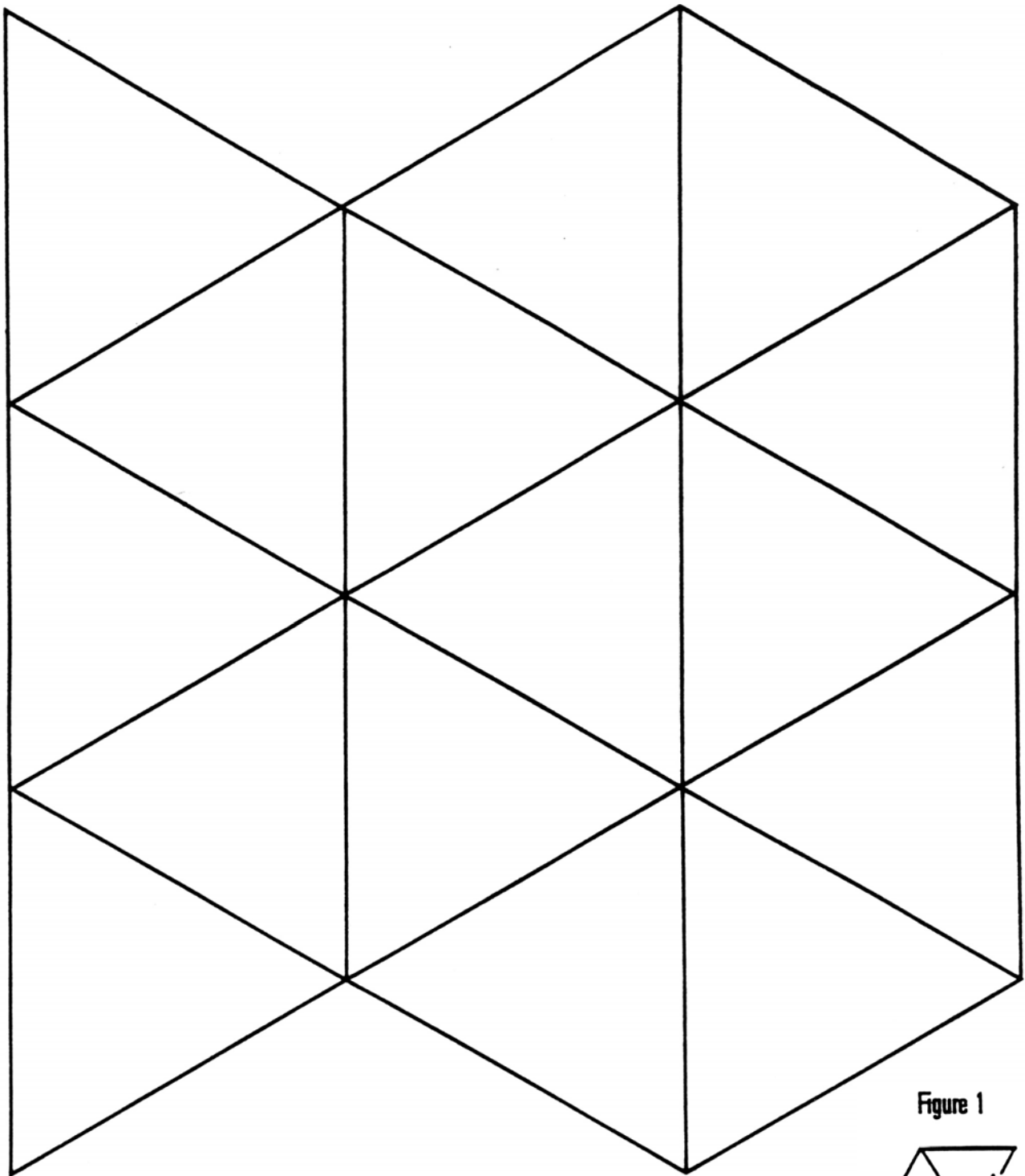
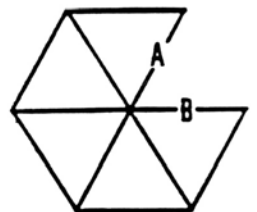


Figure 1



1. Tape the triangle pattern to a stiff piece of paper and cut out all 15 triangles.
2. Tape 5 triangles together in this pattern. (Figure 1)
3. Tape edges "A" and "B" together to form the dome roof.
4. Tape 10 triangles together in this pattern. (Figure 2)
5. Tape end "C" to "D" to form the wall of the dome.
6. Tape the roof on top of the wall then press down to test the strength.

Figure 2

