



KALEIDOSCOPE 5.



PLACE a stick in the kaleidoscope so that it rests on the edges of the mirrors. Which figure forms?

EXPERIMENT with different objects and observe the arising figures.



This kaleidoscope consists of four mirrors. The angle between the mirrors is alternately 120° and 90° . As 120° is exactly one third and 90° is exactly one quarter of a full circle (360°), a threefold and fourfold symmetry arises.

If the stick lies horizontally, you'll see a cube in the kaleidoscope. If it stands vertically, you'll see an octahedron (eight surfaces, from greek octo = eight). If you place a kite-shaped piece in the kaleidoscope you'll see a tetrahedron (four surfaces, from greek = four). If you place a rhombus you'll see a dodecahedron (twelve surfaces, from greek dodeca = twelve).

If you place other more complicated objects, like object 'H', in the kaleidoscope, you'll see far more complicated figures.