



# HINGED KALEIDOSCOPE.

phaeno

da staunst du.



**OPEN** the mirror to its full extend. Do you see the triangle?

**CLOSE** the mirror slowly. How does the triangle change?

The pieces of elastic form an equilateral triangle when the mirror is opened to its full extend (opening angle =  $120^\circ$ ). The side of the triangle closest to you is real – you can touch it. The other two sides appear “behind” the mirror.

You can create all sorts of plane figures, so-called polygones, when you close the mirror further. The first figure you see is a square, then a pentagon, a hexagon... and so on.

If you close the mirror almost fully, the result is an almost circular figure. So you can approximate the perimeter of a circle and calculate the number pi.

