## KALEIDOSCOPE 1.

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ROLL a ball into the kaleidoscope and observe its path in the mirrors.

PLACE different objects into the kaleidoscope and observe the arising figures.

Which figure do you see if you place object 'D' in the kaleidoscope.


This kaleidoscope consists of three mirrors. The angle between any two mirrors is $120^{\circ}$. As $120^{\circ}$ is exactly one third of a full circle $\left(360^{\circ}\right)$, a threefold symmetry arises.
If you place an equilateral triangle in the kaleidoscope, a tetrahedron forms. This figure consists of four surfaces (from greek tetra $=$ four) and is one of the Platonic solids. The surfaces of these fully regular solids consist of equilateral and equiangular polygons of equal size.
If you place object ' $D$ ' in the kaleidoscope, it will form a cube.

Idea: Nik Schwabe, Zürich; construction: Technorama.

