

MATHS / ART / OUTDOOR LEARNING · Y2–Y5

Symmetry & Patterns in Nature

Outdoor maths & art activity

Patterns to find outside

1

Line symmetry

A shape has line symmetry if it can be folded so both halves match perfectly.

Example: Butterfly wings, many leaves, flower petals

2

Rotational symmetry

A shape has rotational symmetry if it looks the same after being turned by less than 360° .

Example: Many flowers: daisy (many-fold), dandelion clock

3

Fibonacci sequence in nature

1, 1, 2, 3, 5, 8, 13... found in the number of petals on flowers, the spirals in sunflowers and pine cones, and the arrangement of leaves on stems.

Example: Count the spirals in a pine cone or sunflower

4

Tessellation

A pattern of shapes that fit together with no gaps — found in honeycombs (hexagons), some fish scales, and some plant structures.

Example: Honeycomb: perfect hexagonal tessellation

