Download Geometric Structures In Nature

As animals develop, tissue bending contributes to shape the organs into complex three-dimensional structures. However, the architecture and packing of curved epithelia remains largely unknown.Geometric model of magic number colloidal clusters. Well-formed icosahedral clusters are characterized by distinct surface features. The surface is tiled with rectangles and truncated triangles ...In condensed matter physics, the term geometrical frustration (or in short: frustration) refers to a phenomenon, where atoms tend to stick to non-trivial positions [citation needed] or where, on a regular crystal lattice, conflicting inter-atomic forces (each one favoring rather simple, but different structures) lead to quite complex structures.As a consequence of the frustration in the ...In mathematics, a fractal is a subset of a Euclidean space for which the Hausdorff dimension strictly exceeds the topological dimension.Fractals tend to appear nearly the same at different levels, as is illustrated here in the successively small magnifications of the Mandelbrot set; Because of this, fractals are encountered ubiquitously in nature. . Fractals exhibit similar patterns at ...