

FRACTALS: THE MANDELBROT SET

“3D Thinking” Page 233 Fractals: Named after the mathematician Benoit Mandelbrot. Fractals are defined as mathematical forms that are generated using a defined set of transformations that include a scaling function whereby the set will generate a form and then infinitely break it down into scaled repeats of itself or into, more generally, self-similar patterns of many types. The operational process for generating the Mandelbrot set is based on an equation involving complex numbers, $Z_{n+1} = Z_n^2 + C$. Numbers within the set are black. Colors are points not within the set but just outside it – lightscribe 1018389.

<http://rogerburrowsimages.com/wp-content/uploads/2018/01/mandelbrot-1.m4v>

Romanesco Broccoli has all of the characteristics of a fractal (the featured photo) and the nesting polygon logic of early Islam, pages 190 to 194, anticipate fractals. The interesting think that the logic can continue as long as patience allows or a computer fills its memory...