TITLE:

Fractals

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A fractal is physical or mathematical object that is recursively constructed or self similar, that is an object that appears self similar at all scales of magnification and is often referred to as infinitely complex.

Fractals can be seen in nature such as in plants, clouds, mountains, etc. Fractals involve some complex mathematical and physical theory, in particular chaos theory.

A fractal can be generated from several repeated iterations of a function which leads to chaotic behavior and strange attractors resulting in the formation of the fractal. The repeated iterations are far too complex to be done by hand and have to be done by a computer.

Fractal gardens can be made by growing micro-organisms in a Petri-dish, crystals grow on a battery pole, or a plant garden where all the plants are fractal in structure (i.e. they are close but not exactly fractal in nature). Anything can be fractal once it has a fractional dimension, the trick is to find its dimension