

Ans

A fractal is defined as jagged or fragmented geometric shapes which can be split into parts that are considered a reduced copy of the whole. Although the study of fractals have existed as early as the 17th century, but the term fractal was only coined in 1975 by Benoit Mandelbrot. It is derived from the Latin word fractus which means broken or fractured. While a fractal is strictly a mathematical construct, it is found in various non-mathematical model such as natural systems & artwork.

To understand fractals, it important to know first what their characteristics are. Its first characteristic is that its structure is defined by fine and small scale and/or substructures. Another characteristic it has is that its shape can't be defined by Euclidean geometry. The next is that it is recursive and shows iteration to some degree. In addition, fractals are informally considered to be infinitely complex as they appear similar in all levels of