

Images of the Mandelbrot set exhibit an elaborate and infinitely complicated boundary that reveals progressively ever-finer recursive detail at increasing magnifications. In other words, the boundary of the Mandelbrot set is a fractal curve. The "style" of this repeating detail depends on the region of the set being examined. The set's boundary also incorporates smaller versions of the main shape, so the fractal property of self-similarity applies to the entire set, and not just to its parts.

https://en.wikipedia.org/wiki/Mandelbrot_set