## **Mandelbrot Set**

**Jonathan Coulton** 

Pathological monsters! cried the terrified mathematician Every one of them a splinter in my eye I hate the Peano Space and the Koch Curve I fear the Cantor Ternary Set The Sierpinski Gasket makes me wanna cry And a million miles away a butterfly flapped its wings On a cold November day a man named Benoit Mandelbrot was born

His disdain for pure mathematics and his unique geometrical insights Left him well equipped to face those demons down He saw that infinite complexity could be described by simple rules Used his giant brain and he turned the game around And he looked below the storm Saw a vision in his head A bulbous pointy form Picked his pencil up and he wrote his secret down

Just take a point called Z in the complex plane (Alternate: Take a point cal led C...) Let Z1 be Z squared plus C (Alternate: Let Z1 be zero squared...) And Z2 is Z1 squared plus C And Z3 is Z2 squared plus C and so on If the series of Zs should always stay Close to Z and never trend away That point is in the Mandelbrot Set

Mandelbrot Set, you're a Rorschach Test on fire You're a day-glo pterodactyl You're a heart-shaped box of springs and wire You're one badass fucking fractal And you're just in time to save the day Sweeping all our fears away You can change the world in a tiny way

Mandelbrot's in heaven, at least he will be when he's dead Right now he's still alive and teaching math at Yale He gave us order out of chaos, he gave us hope where there was none His geometry succeeds where others fail So if you ever lose your way, a butterfly will flap its wings From a million miles away, a little miracle will come to take you home

Just take a point called Z in the complex plane (Alternate: Take a point cal led C...) Let Z1 be Z squared plus C (Alternate: Let Z1 be zero squared...) And Z2 is Z1 squared plus C And Z3 is Z2 squared plus C and so on If the series of Zs will always stay Close to Z instead of trend away That point is in the Mandelbrot Set

Mandelbrot Set, you're a Rorschach Test on fire You're a day-glo pterodactyl You're a heart-shaped box of springs and wire You're one badass fucking fractal And you're just in time to save the day Sweeping all our fears away You can change the world in a tiny way And you're just in time to save the day Sweeping all our fears away You can change the world in a tiny way Go on, change the world in a tiny way Come on, change the world in a tiny way