

## Black Holes

In our universe there are over fifty billion galaxies that we know of. Our galaxy is called the Milky Way. The Milky Way includes all of our planets, stars, sun and other things like space dust.

Galaxies may contain black holes. Black holes are areas of space where matter has compressed so much, it collapsed in on itself. That means there is a massive amount of matter in a very tiny area. The gravitational pull is so strong that everything gets pulled in - even light. That's how they got their name of "black holes".

Black holes can't be seen, but we know they exist. We can see how black holes affect nearby stars and galaxies. Black holes come in all different sizes.

Black holes form when large stars runs out of fuel. When they run out of fuel, the star gets smaller and smaller, or compresses. Eventually it will compress even smaller than an atom!

But as it gets smaller and smaller, the gravity gets stronger and stronger. Anything that gets too close, gets pulled into the black hole. Luckily, even the closest black holes to Earth are too far away to pull our sun and planets into it!