



## Learning From The Stars: Cosmic Recycling



If you throw a plastic bottle in the bin today, that bottle will sit in a landfill, or float in the ocean, for hundreds of years. No one knows what Earth will be like in hundreds of years. But we know that plastic bottle will still be a plastic bottle!

What can we do to stop this happening? We can follow the example of the Universe, and recycle! In the very beginning, before the Sun, the Earth and the rest of our Solar System existed, the first stars began burning hydrogen gas and creating helium. Then they burned helium to make carbon and oxygen and other chemicals.

Like humans, stars are born, live and eventually die. Whether they die in dramatic supernova explosions or by losing control of their outer layers, the newly made chemicals in their bellies are thrown into space.

The space photograph above shows a gigantic region of space called a nebula. For millions of years new stars have been born out of the gas in this nebula. And for millions of years these stars have died and returned the gas to the nebula so the circle could begin again.

Without this cosmic recycling, the Sun and planets of our Solar System would not exist. Recycling has played an important role in helping life to bloom on Earth. And if we want life to continue flourishing on our planet, we need to make recycling an important role in our daily lives, too.

### COOL FACT

Recycling doesn't have to be hard work; in fact it can be fun! Why not make your own jewellery stand, cute kitty plant pots or a jet pack – all from recycled plastic bottles! Go to <http://www.boredpanda.com/plastic-bottle-recycling-ideas/>

