



Cosmic Building Blocks

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You can build some pretty amazing things simply by sticking blocks of Lego together. People have made life-sized lego houses, cities and lego rockets! Just like these impressive Lego structures, humans are built of tiny pieces too. Human building blocks are called organic molecules.

Molecules are made up of chemicals like carbon, hydrogen and oxygen. Organic molecules have been found all over the Universe. Unlike lego, molecules are so small that nobody can see them, except with extremely powerful microscopes.

Telescopes can also help us find these special molecules.

Astronomers using the Japanese Subaru Telescope in Hawaii have recently found signs of organic molecules on a comet called 21P/Giacobini-Zinner. Scientists believe it was formed in the regions of Jupiter and Saturn when these planets were first beginning to form.

Comets are clues to the past of our early Solar System. They are made mostly of ice and dust, but are also known to be good hosts to organic materials. Comet 21P/Giacobini-Zinner currently whizzes around our Sun once every six and a half years.

We still don't know how life began on Earth 3 billion years ago, but one thing is certain; it all began with these tiny organic molecules. These building blocks of life are very fragile and they exist all over the Universe. Who knows where they'll be found next!

Image credit: Michael Jaeger



COOL FACT

Over 6,000 comets have been counted in our Solar System, but it is believed that the true number could be more like a trillion! (That's a million million!)

This Space Scoop is based on a Press Release from [NAOJ](#).
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