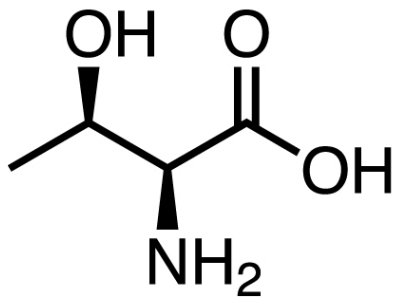
Meteorites might have created life's building blocks

Read the full article at rsc.li/2nJ3wSg, first published 12 February 2018

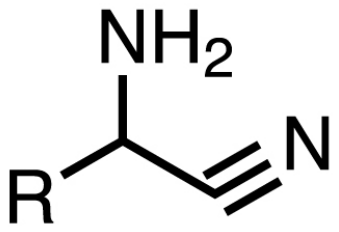
Scientists do not know exactly how life started on Earth. How was the first DNA or protein molecule created? There are several competing theories.

Recent research supports the theory that meteorite impacts converted simple chemicals into the complex compounds that are vital to life on Earth.

Researchers in Germany demonstrated that friction between rocks can catalyse the reactions that make α-aminonitriles. These can be converted into amino acids, which are the constituents of proteins.



An amino acid (threonine)



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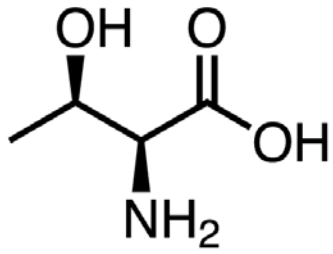

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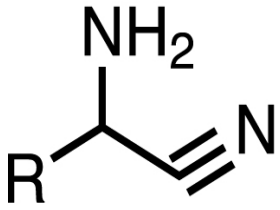

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ROYAL SOCIETY OF CHEMISTRY

1. What do you think mechanochemical means? How did you work this out?
2. Think of one other way that life might have started on Earth and suggest how you could test your theory.
3. Explain two reasons why is it important to share and discuss our research with other scientists.