

Writing chemical equations from text

Education in Chemistry

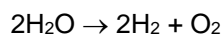
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rsc.li/2B8ISRg

Answers

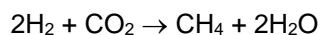
Water is also used onboard the ISS to produce oxygen. 'We electrolyse water to split it open to hydrogen and oxygen,' says Laura. 'The oxygen goes into the atmosphere for the crew to breathe.'

water → hydrogen and oxygen



The hydrogen is then combined with another waste product – carbon dioxide breathed out by the crew – to make methane and water. This is known as the Sabatier reaction.

hydrogen + carbon dioxide → methane + water



The NASA team is also developing a way to crack open the methane to produce more hydrogen.

methane → carbon + hydrogen

