Start	(Q) What does the voltage of a cell depend on? A – The size of the cell B – How much oxygen is present C – The difference in reactivity of the two electrodes
(A) The voltage of a cell depends on the difference in reactivity of the two electrodes.	(Q) Where can hydrogen be obtained from on the space station without transporting it from Earth? A – From plants B – From water C – From the moon
(A) Water can be electrolysed using electricity from solar cells. This produces hydrogen and oxygen.	(Q) Chemical cells produce a voltage. When do they stop producing a voltage and 'go flat'? A – When one of the reactants has run out. B – When they get too hot C – When they reach the expiry date on the cell
(A) A cell will produce a voltage until one of the reactants runs out.	(Q) Hydrogen can be used as a fuel for cars. Which of the following is an advantage of using hydrogen instead of petrol? A – It is cheaper B – Exhaust gases contain only water C – It is easier to store
(A) Hydrogen powered cars will produce only water in their exhaust gases.	(Q) What is the only chemical product when hydrogen and oxygen are reacted together in a fuel cell? A – Water B – Electricity C – Carbon Dioxide
(A) Water is the only chemical product from a hydrogen-oxygen fuel cell.	(Q) Which of the following is a disadvantage of using hydrogen as a fuel? A – There are currently very few hydrogen filling stations in the UK B – It directly contributes to global warming C – Hydrogen is radioactive

(A) At present, there are very few hydrogen filling stations in the UK, but this will improve over time.	(Q) Which is not an advantage for using a hydrogen-oxygen fuel cell in a space station? A – No moving parts B – Small and compact size C – They generate useful heat for warmth
(A) Fuel cells do not generate much heat due to their efficiency, so they are not useful for keeping the space station warm.	(Q) What is a disadvantage of a rechargeable cell when compared with an alkaline cell? A – It is smaller B – It costs more to manufacture C – It can be reused many times.
(A) Rechargeable cells cost more to manufacture than alkaline cell.	(Q) In addition to a fuel, what other chemical is needed by a fuel cell? A – Nitrogen B – Oxygen C - Methane
(A) Fuel cells all require oxygen. Often this comes from the air.	(Q) In the space station, why can you not rely on solar cells all the time? A – They have to be shut down for maintenance B – They are unreliable and frequently overheat C – They only produce electricity when the sun is visible
(A) Solar cells only work when sunlight falls on them, and this is not always the case on the space station.	End