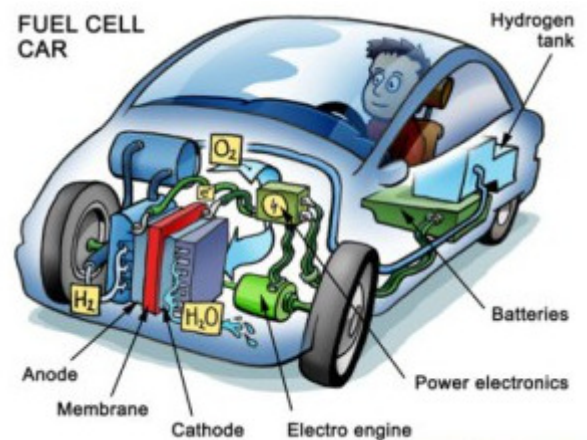
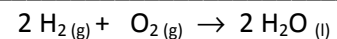
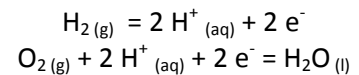
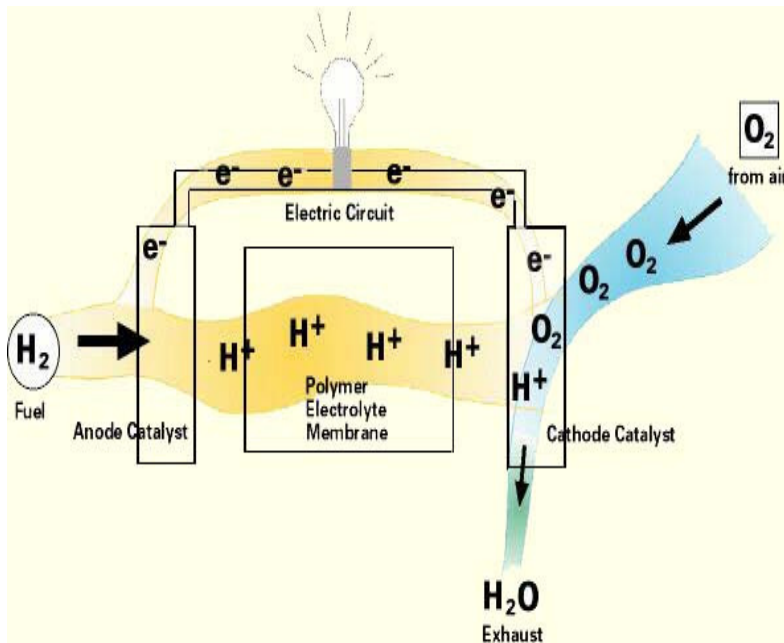


EXAMEN : Baccalauréat général - Série S-SVT ou S-SI	Session 2014
ÉPREUVE : Évaluation spécifique de Langue en section européenne	
PHYSIQUE-CHIMIE en langue ANGLAISE	
Thème : Enjeux énergétiques	Sujet n°16

## THE HYDROGEN CAR



The car of the future is here today. It doesn't use gasoline and it doesn't pollute the air. In fact, it produces steam instead of exhaust. So what's the mystery fuel? Hydrogen - the simplest and most abundant element in the universe. And some people think that in 20 to 30 years, we'll all be driving these hydrogen-powered, fuel-efficient vehicles.

What makes a hydrogen car possible is a device called a fuel cell, which converts hydrogen to electricity, giving off only heat and water as byproducts. Because it's non-polluting, hydrogen seems like the ideal fuel for the 21st century. A lot of people in the government and the auto industry are excited about its potential. Hydrogen cars have the potential to be fuel-efficient and offer the hope of eco-friendly, green driving. But there are still a lot of problems that need to be overcome and questions that need to be answered before hydrogen becomes the fuel of choice. For instance, where will we get the hydrogen? How expensive will these fuel-efficient cars be to purchase? Will you be able to find a hydrogen fuelling station to refill your tank? And, perhaps most importantly, as a fuel, is hydrogen really as non-polluting as it seems?

by Christopher Lampton,

From <http://auto.howstuffworks.com/fuel-efficiency/hybrid-technology/hydrogen-cars.htm>

### Questions:

1. Present and comment on this document.
2. Do not forget to focus on the chemistry and/or physics topics involved in the principle of the hydrogen car.
3. Do you think that the hydrogen car is a "green vehicle" and that it has a bright future ahead?