ANSWER THE QUESTIONS WITH SKETCHES AND NOTES. CLICK ON EACH 'SCIENCE WARNING SYMBOL', FOR HELPFUL LINKS.

THE HYDROGEN ECONOMY and ENERGY SAVING DEVICES KNOWLEDGE MAP

1. BRIEFLY DESCRIBE THE HYDROGEN ECONOMY.

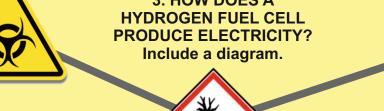


2. DESCRIBE TWO WAYS HYDROGEN CAN BE USED AS A SOURCE OF FUEL

> 3. HOW DOES A **HYDROGEN FUEL CELL** Include a diagram.

4. DRAW A LABELLED DIAGRAM, SHOWING HOW A **VEHICLE IS POWERED BY** HYDROGEN.

5. PASTE AN IMAGE OF ONE MORE USE OF A **HYDROGEN FUEL CELL**



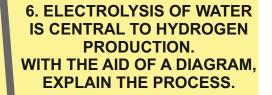


9. WHAT ARE THE ADVANTAGES OF AN ENGINE WITH 'STOP / START' TECHNOLOGY? Explain how 'stop / start' works

8. DESCRIBE HOW HYDROGEN IS **USED TO GENERATE LARGE AMOUNTS OF ELECTRICITY AT** POWER STATIONS.



7. LIST THREE ADVANTAGES AND DISADVANTAGES. OF **HYDROGEN AS A FUEL AND ENERGY / POWER SOURCE.**





10. WHAT ARE THE **ADVANTAGES OF USING 'WIND-UP' ELECTRICAL DEVICES?** Include reference to a wind-up torch.



11. HOW DOES A SOLAR **CHARGER WORK?** Describe a product that uses a solar charger.



12. WHAT IS A MAGNETIC FORCE TORCH AND HOW **DOES IT WORK? Include a** diagram.



13. USING YOUR IMAGINATION, **HOW COULD THE TECHNOLOGY USED IN A** MAGNETIC FORCE TORCH, BE **APPLIED ON A LARGER COMMERCIAL SCALE?**







