



Name:..... Class:..... No.

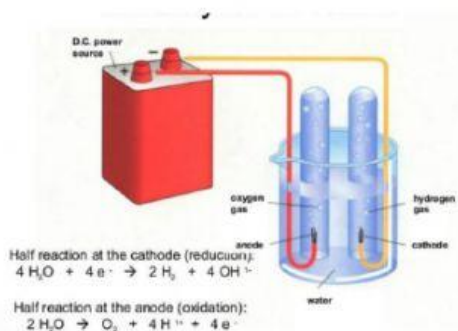
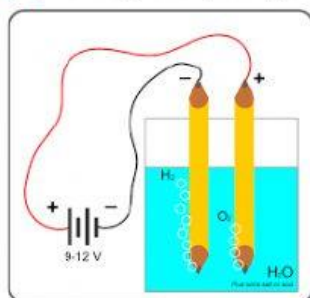
Electrolysis of Water

(อิเล็กโทรลิซิสของน้ำ)

Electrolysis – the process by which electric current is passed through a substance to cause a chemical change

anode (+) is positively charged electrode

cathode (-) is negatively charged electrode



Half reaction at the cathode (reduction):



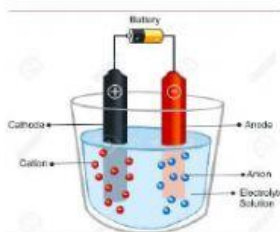
Half reaction at the anode (oxidation):



Tick the correct answer.

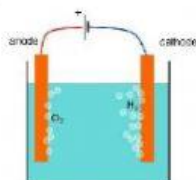
- Water is made up of two different atoms.
What are they?
 - hydrogen and nitrogen
 - oxygen and helium
 - hydrogen and oxygen
 - carbon dioxide and oxygen
- We can split or separate the water molecule into its component atoms by _____.
 - photosynthesis
 - combustion
 - electrolysis
 - corrosion

For numbers 3-6, refer to diagram below.



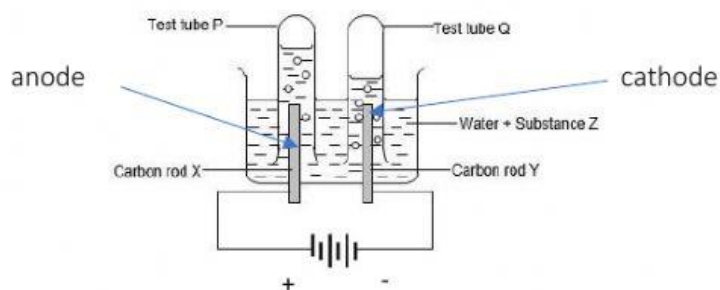
3. What is the name of the positive electrode?
 - a. cathode
 - b. anode
 - c. electrode
 - d. electrolyte
4. What is the name of the negative electrode?
 - a. cathode
 - b. anode
 - c. electrode
 - d. electrolyte
5. The electrode connected to negative terminal of the battery is _____.
 - a. cathode
 - b. anode
 - c. electrode
 - d. electrolyte
6. The electrode connected to positive terminal of the battery is _____.
 - a. cathode
 - b. anode
 - c. electrode
 - d. electrolyte

For numbers 7-8, refer to diagram below.



7. What is the gas produced by the anode?
 - a. nitrogen gas
 - b. hydrogen gas
 - c. water vapor
 - d. oxygen gas
8. What is the gas produced by the cathode?
 - a. nitrogen gas
 - b. hydrogen gas
 - c. water vapor
 - d. oxygen gas

For numbers 9-10, refer to diagram below.



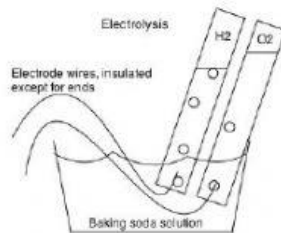
9. When the switch is turned on, which gas is collected in Test tube P?

- a. hydrogen gas
- b. oxygen gas
- c. helium gas
- d. nitrogen gas

10. When the switch is turned on, which gas is collected in Test tube Q?

- a. hydrogen gas
- b. oxygen gas
- c. helium gas
- d. nitrogen gas

For numbers 11-12, refer to diagram below.



11. What substance is mixed with water to help water conduct electricity?
These substances include salt and baking soda.

- a. gas
- b. minerals
- c. electrolyte
- d. metal

12. What electrolyte is used in the above picture?

- a. salt
- b. calcium
- c. vinegar
- d. baking soda