

# St. Andrews Scots Sr. Sec. School

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Session: 2022-2023 – Worksheet - 8

**Class: VIII**

**Subject: Science**

**Topic: Chemical Effects of Electric Current**

## Q.1. Define these terms:

- a) Electrolysis
- b) Electrode
- c) Electrolyte
- d) Electroplating

## Q.2. Answer in one word:

- a) Which part of an atom is responsible for flow of current?
- b) What type of effect of current do the deposits of metal on electrodes show?
- c) Which effect of current causes the bulb to glow?
- d) Which metal is plated on handle bars of cycles and rim of wheels?
- e) Which part of the bulb glows?

## Q.3. Fill in the blanks:

- a) The object to be electroplated is taken as \_\_\_\_\_ electrode.
- (b) One of the most common applications of chemical effect of electric current is \_\_\_\_\_.
- (c) Small amount of a mineral salt present naturally in water makes it a \_\_\_\_\_ of electricity.
- (d) Electroplating of \_\_\_\_\_ is done on objects like water taps and cycle bell to give them a shiny appearance.
- e) \_\_\_\_\_ discovers the electrolysis of water.

## Q.4. Multiple choice questions:

- a) When electric current is passed through a conducting solution, there is a change of colour of the solution. This indicates
  - (i) the chemical effect of current.
  - (ii) the heating effect of current.
  - (iii) the magnetic effect of current.
  - (iv) the lightning effect of current.

b) Bob's uncle has set up an electroplating factory near his village. He should dispose off the waste of the factory

- (i) in the nearby river.
- (ii) in the nearby pond.
- (iii) in the nearby cornfield.
- (iv) according to the disposal guidelines of the local authority

c) Cooper wire is a

- (i) Good conductor
- (ii) Bad conductor
- (iii) Can be both at different time
- (iv) None of these

d) Which of these is not a conductor of electricity

- (i) Lemon water
- (ii) Vinegar
- (iii) Honey
- (iv) None of these

e) An electrolyte is a

- (i) Solids that conducts electricity
- (ii) liquids that does not conduct electricity
- (iii) Solids that does not conduct electricity
- (iv) liquids that conduct electricity

**Q.5. Answer the following questions:**

a) Why does a potato turn green on passing current? Around which terminal is the greenish patch observed?

b) Why is distilled water an insulator of electricity?

c) How are tin cans made? Why are tin cans used for storing food items?

d) Current does not flow in a circuit if there is a gap between the two wires. Does it indicate that air is a poor conductor of electricity? Does air never conduct electricity? Explain.

e) Why are electric fires extinguished with either using CO<sub>2</sub> extinguisher or mud but not water?