[Loai: ĐỌC HIỂU ĐỀ 1 – 8 CÂU]

[Q]

R**ead the following passage and choose the correct answer to each of the questions from 33 to 40.**

The ability to conduct electricity is one of the key properties of a metal. Other solid material such as silicon can conduct electricity but only effectively at certain temperatures. Also, some substances such as salt (sodium chloride) can conduct when molten or when dissolved in water. The ability of metals to conduct electricity is due to how their atoms bond together. In order to bond together the metal atoms lose at least one of their **outermost** electrons. This leaves the metal atoms with a positive charge and they are now strictly ions. The lost electrons are free to move in what are known as a sea of electrons. Since the electrons are negatively charged they attract the ions and this is what keeps the structure together.

An electric current is a flow of charge and since the electrons in the sea of electrons are free to move they can be made to flow in one direction when a source of electrical energy such as a battery is connected to the metal. Hence we have an electric current flowing through the wire, and this is what makes metals such good conductors of electricity. The only other common solid conducting material that pencil users are likely to encounter is graphite (what the ‘lead’ of a pencil is made from). Graphite is a form of carbon and again the carbon atoms bond in such a way that there is a sea of electrons that can be made to flow as an electric current. Likewise, if we have an ionic substance like salt we can make the electrically charged ions flow to create a current but only when those ions are free to move, either when the substance is a liquid or dissolved in water. In its solid state an ionic substance like salt cannot conduct electricity as its charged ions cannot flow.

Electrical insulators are substances that cannot conduct electricity well either, because they contain no charged particles or any charged particles **they** might contain do not flow easily. Water itself is a poor conductor or electricity as it does not contain a significant amount of fully charged particles (the ends of a water molecule are partly charged but overall the molecule is neutral). However, most water we encounter does contain dissolved charged particles, so it will be more conductive than pure water. Many of the problems that occur when touching electrical devices with wet hands result from the ever-present salt that is left on our skin through perspiration and it dissolves in the water to make it more conductive.

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Q 33

Electrical conductivity is. \_\_\_\_\_\_\_\_\_\_\_

1. one of the most important properties of metals

0. one of the key properties of most solid materials

0. impossible for any substance when it is dissolved in water

0. completely impossible for silicon

[Q]

According to the passage, a metal can conduct electricity due to ……..

0. the absence of free electrons

0. its atoms with a positive charge

1. the way its atoms bond together

0. the loss of one electron in the core of its atoms

[Q]

The word “**outermost**” in paragraph 1 mostly means

0. the lightest

0. the heaviest

0. nearest to the inside

1. furthest from the inside

[Q]

The word “**they**” in paragraph 3 refers to

0. charged ions

0. electric currents

0. charged particles

1. electrical insulators

[Q]

Water is a poor conductor because it contains\_\_\_\_\_\_\_\_\_\_\_

0. only a negative electric charge

0. no positive or negative electric charge

1. only a small amount of fully charged particles

0. only a positive electric charge

[Q]

We can have problems when touching electrical devices with wet hands because

0. the eater itself is a good conductor of electricity

1. the water dissolves the salt on our skin and becomes more conductive

0. the water contains too many neutral molecules

0. the water containing no charged particles makes it more conductive

[Q]

Which of the following is NOT true according to the passage?

1. Pure water is much more conductive than most water we encounter every day.

0. Graphite is a common solid substance that can conduct electricity.

0. Salt can conduct electricity when it is molten or dissolved.

0. Some materials are more conductive than others.

[Q]

Which of the following could best serve as the title of the passage?

0. Electrical Energy

0. Electrical Insulators

0. Electrical Devices

1. Electrical Conductivity