**КРИП-2 Английский язык в профессиональной деятельности. 8 ноября**

**Темы: Электрическая цепь.**

1. **Посмотрите видео** [**https://www.youtube.com/watch?v=BattAqQEM4A**](https://www.youtube.com/watch?v=BattAqQEM4A)
2. **Прочитайте слова к тексту**
3. **Прочитайте текст**
4. **Письменно выполните упражнение после текста (true/false).**

**Слова:**

electric circuit – электрическая цепь

electric charge – электрический заряд

potential difference – разность потенциалов

electrostatic generator – электростатический генератор

direct current generator – генератор постоянного тока

connected in series – соединены последовательно

parallel circuit – параллельная цепь

**TEXT**

**ELECTRIC CIRCUITS**

The concepts of electric charge and potential are very important in the study

of electric currents. When an extended conductor has different potentials at its

ends, the free electrons of the conductor itself are caused to drift from one end to

the other. The potential difference must be maintained by some electric source

such as electrostatic generator or a battery or a direct current generator. The wire

and the electric source together form an electric circuit, the electrons are drifting

around it as long as the conducting path is maintained.

There are various kinds of electric circuits such as: open circuits, closed

circuits, series circuits, parallel circuits and short circuits.

To understand the difference between the following circuit connections is

not difficult at all. If the circuit is broken or «opened» anywhere, the current is

known to stop everywhere. The circuit is broken when an electric device is

switched off. The path along which the electrons travel must be complete otherwise

no electric power can be supplied from the source to the load. Thus the

circuit is “closed” when an electric device is switched on.

When electrical devices are connected so that the current flows from one

device to another, they are said «to be connected in series». Under such conditions

the current flow is the same in all parts of the circuit as there is only a

single path along which it may flow. The electrical bell circuit is considered to

be a typical example of a series circuit. The “parallel” circuit provides two or

more paths for the passage of current. The circuit is divided in such a way that

part of the current flows through one path and part through another. The lamps

in the houses are generally connected in parallel.

The “short” circuit is produced when the current can return to the source

of supply without control. The short circuits often result from cable fault or

wire fault. Under certain conditions the short circuit may cause fire because the

current flows where it was not supposed to flow. If the current flow is too great

a fuse is used as a safety device to stop the current flow.

**Say, whether these statements are true or false**

1. When an extended conductor has the same potential at its ends, free

electrons are drifting from one end to another.

2. The wire and the electric source together form an electric circuit.

3. A path of any material will allow current to exist.

4. Silver, copper and gold oppose very strongly.

5. The slighter the opposition is, the better the insulator is.

6. There is only one type of electric circuit.

7. We close the circuit when we switch on our electric device.