## **Classifying Materials**

#### International words

**Существительные** (n) association, centre, characteristic, colleague, conference, contact, cooperation, fundamentals, international, mass, neutron, orbit, proton, reaction, reactor, specialist, sphere, synthetics, system, technician, theory, university, valency = valence

Название наук: biology, geology, medicine, physics

Прилагательные: (adj): characteristic, chemical, electrical, electronic, elementary, experimental, fundamental, official, practical, socialist, theoretical, unique

**Наречия** (adv): experimentally, fundamentally, officially, practically, theoretically

**Глаголы** (V): cooperate, orbit, theorize, contact

### Read and learn new words by heart

able -способный

Ability -способность

According to - на основании согласно чему-л

Add- дополнять, добавлять

Addition- дополнение

In addition to- к тому же, кроме того

Also -также

Base - основывать

Basic - основной

Certain- определенный

Charge (n, v) - заряд, заряжать

Consider- рассматривать

Consideration - рассмотрение

Easy- нетрудный, легкий

Explain - объяснять

Explanation- объяснение

Few -мало



A few - несколько

Free - свободный

Germanium - германий

High - высокий

Limit - предел, ограничивать

Limitless - беспредельный

Low - низкий

Move - двигаться

Motion - движение

Number - число

A number of - ряд, несколько

Particle - частица

Property - свойство

Silicon - кремний

Such - такой

Such as - такой как

Take part in (took, taken) - принимать участие в

Therefore - поэтому

Way - способ

# Read and translate the text. Classifying Materials

There are many ways of classifying materials. The one we shall use here is based on the ability of material to conduct electricity. It is known that conduction takes place as a result of the motion of charged particles, usually electrons. The ability of any material to conduct electricity is directly proportional to the number of charged particles inside the material that can be set in motion. Materials (for example metals), that have relatively large number of free electrons, readily conduct electric current and are called conductor. Other materials having very few (or no) free electrons do not readily conduct electric current under normal conditions (условие) and are called insulators. It should be realised (следует учесть) that the terms 'conductor' and' 'insulator' are not absolute, that is (то есть) some conductors do not conduct as well as other conductors, while (в то время как) some insulators do not insulate as well as other insulators.

### **Answer the questions**

- 1. What is the one way of classifying materials?
- 2. When does conduction take place?
- 3. What is directly proportional to the number of charged particles inside the material?
- 4. What is a conductor?
- 5. What is an insulator?

### Do the nouns with -ity

able – способный, ability-.....
 Possible – возможный, possibility.....
 Stable – стабильный, stability - .....
 Intensive - интенсивный - intensity - .....
 major - больший – majority - .....
 minor – меньший – minority - .....
 resistive – имеющий сопротивление – resistivity- .....
 radioactive – радиоактивный – radioactivity - .....

Else – эластичный - elasticity - .....

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Thank you for your attention.