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ПЛАН-КОНСПЕКТ ИНТЕГРИРОВАННОГО УРОКА (АНГЛИЙСКИЙ ЯЗЫК+ЭЛЕКТРОТЕХНИКА) ПО ТЕМЕ «ЭЛЕКТРИЧЕСКИЕ ЦЕПИ»

Тема урока: «Электрические цепи»

Цель урока: совершенствование навыков перевода литературы по специальности.

Задачи урока:

I Обучающая: 1)учить переводить тексты по специальности; 2) учить искать необходимую информацию в тексте.

II Развивающая: 1) развивать память и логическое мышление; 2) расширять технический кругозор студентов; 3) ознакомить с достижениями и открытиями в такой области знаний как электротехника.

III Воспитательная: 1) повышать мотивацию к изучению технического английского языка как языка необходимого для более полного освоения специальности.

Предварительная работа: подготовка студентами рассказа-загадки об одном из ученых, которые внесли ценный вклад в развитие электротехники.

Оборудование урока: компьютерный диск «English Platinum 2000», презентация с использованием приема медиадидактики «Скрытое изображение», плакаты с высказываниями великих людей о науке; портреты выдающихся ученых, которые внесли ценный вклад в развитие электротехники; выставка словарей; плакаты со схематическим изображением электрических цепей; раздаточный материал с заданиями к тексту; карточки со словами.

Ход урока. Организационный момент.

Good morning, dear students. I'm very glad to greet you at our lesson. The theme of our lesson is "Electrical circuits". I'm sure that you can tell me a lot of interesting things about them in Russian. But today we'll speak about them in English. I hope that during the lesson you'll improve your translation skills and the knowledge received today will help you in your future profession.

Актуализация опорных знаний.

I would like to start our lesson with the words of Thomas Edison who used to say: "Genius is one percent inspiration, ninety-nine percent perspiration" Let them be the epigraph of our lesson. What can inspire us? I think the way of life of the outstanding people who made a valuable contribution to electrical engineering. Listen to your group mates and answer the question: Who are they speaking of? This "portrait gallery" will help you.

Контроль качества знаний.

Выступления студентов с рассказами-загадками об ученых.

Начальная мотивация.

Maybe you will follow the example of these well-known persons and they will inspire you to make your own inventions. In this case you'll have to know much and to work much. Don't forget that the "Genius is ninety-nine per cent perspiration". So it's time to perspire. In English we can say also "to toil over" or "to sweat".

Работа с текстом.

а) Предтекстовый этап. Работа со словами.

First of all look at this exhibition of dictionaries. You know there are a lot of dictionaries in the world, for example English – Russian dictionaries, modern language dictionaries, business dictionaries, dictionaries of slang. But which dictionary will you use to translate technical texts?... And why do we say dictionary not vocabulary? Do these words have the same meanings? Let's make a vocabulary to our text.

Работа с интернациональными словами. Найти 5 слов в слитной записи.

Look at the blackboard. Can you find five words in this long word?

(resistorelementparallelserieselectric)

I hope it wasn't difficult for you, was it? Why? How do we call such words?

They are called international words. They are really our helpers when we translate texts.

Определение значения слова по толкованию.

Often the definition of the words given in texts helps us to understand their meaning.

Try to understand the meaning of these words:

1. It is an unbroken conducting path from, and back to, a power supply.
(circuit)

2. It is the flow electricity through a circuit. It can be direct or alternating.
(current)

3. It is the electromotive force of a supply of electricity, measured in volts.
(voltage)

4. This device can produce electric current. Electric current starts to move from it. (source)

You've coped with this task very good because you know these notions. You've studied them at your specific subjects. So we can conclude that it is much easier to translate the texts when we know the subject well.

Определение значения слова по контексту.

But we can understand some words from the context. What does the word "equal" mean?

1. Resistance *equals* voltage divided by current. 2. Current *equals* voltage divided by resistance. 3. Voltage *equals* current times resistance. 4. Current times resistance *equals* voltage. 5. How much does eleven times five *equal*? How do we call the first three sentences? (It is Ohm's Law.)

б) Текстовый этап. Аудирование текста и его перевод в малых

группах. (Компьютерный диск «English Platinum 2000», пособие для средних
Вторая Всероссийская научно-методическая конференция, 10 ноября 2014 - 10 февраля 2015
"Педагогическая технология и мастерство учителя")

специальных учебных заведений Куклиной И. П. «Energy Is the Source of Life»)

Listen to the text “Electric circuits”. Then try to name the schemes on the blackboard. Which of them is a parallel/ a series circuit?

Let’s translate the text. Do it in groups. You have 10 minutes. Later we will compare whose translation is the best.

в) Послетекстовый этап. Выполнение заданий к тексту в малых группах.

Let’s do the following tasks in groups too.

I. What part of the text does the first scheme describe? What part of the text does the second scheme describe? Can you show the power supply, the conductor, the load using our schemes?

(The representatives of each group show different scheme parts and name them using the schemes on the blackboard.)

II. Answer the questions:

1. What elements does a series circuit include? 2. How are the elements in both circuits connected? 3. In what circuit is the value of current the same in all the elements? 4. In what circuit is the value of voltage different?

III. Are the following sentences true or false?

1. A parallel circuit has the same value of current in all the elements. 2. A parallel circuit has the same value of voltage in all the elements. 3. An electric circuit is an unbroken conducting path only from a power supply. 4. An electric circuit has two main parts: the power supply and the load.

IV. Find the English equivalents in the text.

1. Электрическая цепь содержит три основные составляющие: источник тока, проводник и нагрузку. 2. Электрическая цепь – это неразрывный проводник электричества, протянутый от источника тока и обратно к нему. 3. По проводнику идет ток. 4. Нагрузкой служит такое электрическое устройство как, например, лампа.

Now let your group mates do these tasks. Check their answers.

Обобщение и систематизация изучаемого материала. Выполнение письменного задания на заполнение пропусков в тексте.

Let's see what did you remember? Fill in the gaps.

Объяснение домашнего задания.

Решить задачу по электротехнике «Электрический чайник».

An Electric Kettle

An electric kettle has a heater with two sections. With one connected to the circuit the water in the kettle boils in 20 min, with the other — in 30 min. How long will it take to boil water with both sections connected: a) in series, b) in parallel?

Given: $t_1=20$ min; $t_2=30$ min;

Find: $t_1=?$ and $t_2=?$

Игра «Скрытое изображение» (Презентация «Великие ученые»)

I suggest you to play an Undercover Game. Divide into two (three) groups. Make a signal when you have written the answer on a piece of paper. Points are awarded based on the number of rectangles remaining. Wrong answers cost a point.

Подведение итогов урока.

Now let's share our impressions. Did you like this lesson? Why? What was especially interesting for you? Was the lesson worth attending? What was new for you? It was very pleasant to work with you. I hope that you have learnt a lot of useful information and broadened your technical outlook. The knowledge received today will help you in your future profession.