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IMPROVING THE TEACHING OF THE TOPIC" COPPER AND ITS COMPOUNDS " WITH THE HELP OF INTERACTIVE METHODS

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Abstract

This article briefly describes the improvement of the teaching of the topic "Copper and its compounds" of the general school chemistry course using interactive methods.

Key words

Interactive education, interactive method, "Brainstorming" method, "Working in small groups", strategies, graphic organizers.

The tasks assigned to pedagogical staff are extremely significant and responsible in order to ensure that the knowledge, skills and qualifications of the learners are at a level that meets the requirements of the time. To fulfill this task, it is necessary for teachers to constantly work independently, improve their skills and scientifically creative research on their own, regardless of what type of educational institution they work in. Even in terms of the obligation to fulfill the requirements of state educational standards, there is no doubt that the level of professional competence of the teacher in accordance with the requirements of the period ensures a positive solution to the problem solution. For this purpose, there is a need for the widespread use of modern methods of teaching by teachers in the educational process. The application of modern teaching methods leads to the achievement of high efficiency in the teaching process. When choosing educational methods, it is considered advisable to choose based on the didactic task of each lesson. While maintaining the traditional lesson form, enriching it with techniques that activate the activities of different-district learners leads to an increase in the level of appropriation of learners. To do this, it is required to rationally organize the lesson process, to gain the interest of educators by the educator, to constantly stimulate their activity in the educational process, to break the educational material into small pieces and open their content, to use techniques such as mental attack, work in small groups, controversy, problem situation, directing text, Project, role-playing games, and to

In modern conditions, methods of an innovative nature are also used in the educational system. Among them, the most widely popular methods are considered interactive methods known by the single name.

Interactive education is considered the type of education and the form of training that is recognized as the most optimal way to improve the effectiveness of Education.

Interactive education (Eng. "interact", rus. "interactive"; "inter" - mutual," act " - to act) is an education based on the organization of the interaction movement of students towards the acquisition of knowledge, skills, qualifications and certain moral qualities.

Interactive methods are those that serve to organize the mutual movement of students towards the acquisition of knowledge, skills, qualifications and certain moral qualities, as well as their cooperation with the teacher.

This type of method is an important structural element of interactive education. Currently, there are more than 100 types of interactive methods, which can be effectively used from each of them in the educational process, based on the nature of the educational material, age and psychological characteristics of students.

When these techniques are used, the educator encourages the learner to take an active part. The learner, on the other hand, is actively involved throughout the process. The useful aspects of the approach in which the learner is at the center are manifested in:

- reading-learning with higher educational performance;

- high level of stimulation of the learner;

- consideration of previously acquired knowledge as well;

- the Coordination of the intensity of study to the needs of the learner;

-support of the initiative and responsibility of the learner;

- to be learned by performing in practice;

-creation of conditions for bi-lateral feedback [Muslimov N.A., Usmanboeva M.H. 2015: 81]

The purpose of teaching the topic" copper and its compounds " using interactive methods:

By teaching the topic "copper and its compounds" in secondary schools with the help of interactive methods, information related to copper and its compounds in the minds of students about their acquisition, physical and chemical properties, works, concepts about its place in our life, terms as well as the formation and development of new information, as well as the careful assimilation of knowledge

Before teaching the topic" copper and its compounds " through interactive methods, we must briefly familiarize ourselves with what methods enter into interactive educational methods.

For example, the structure of the **"three-step interview"** method

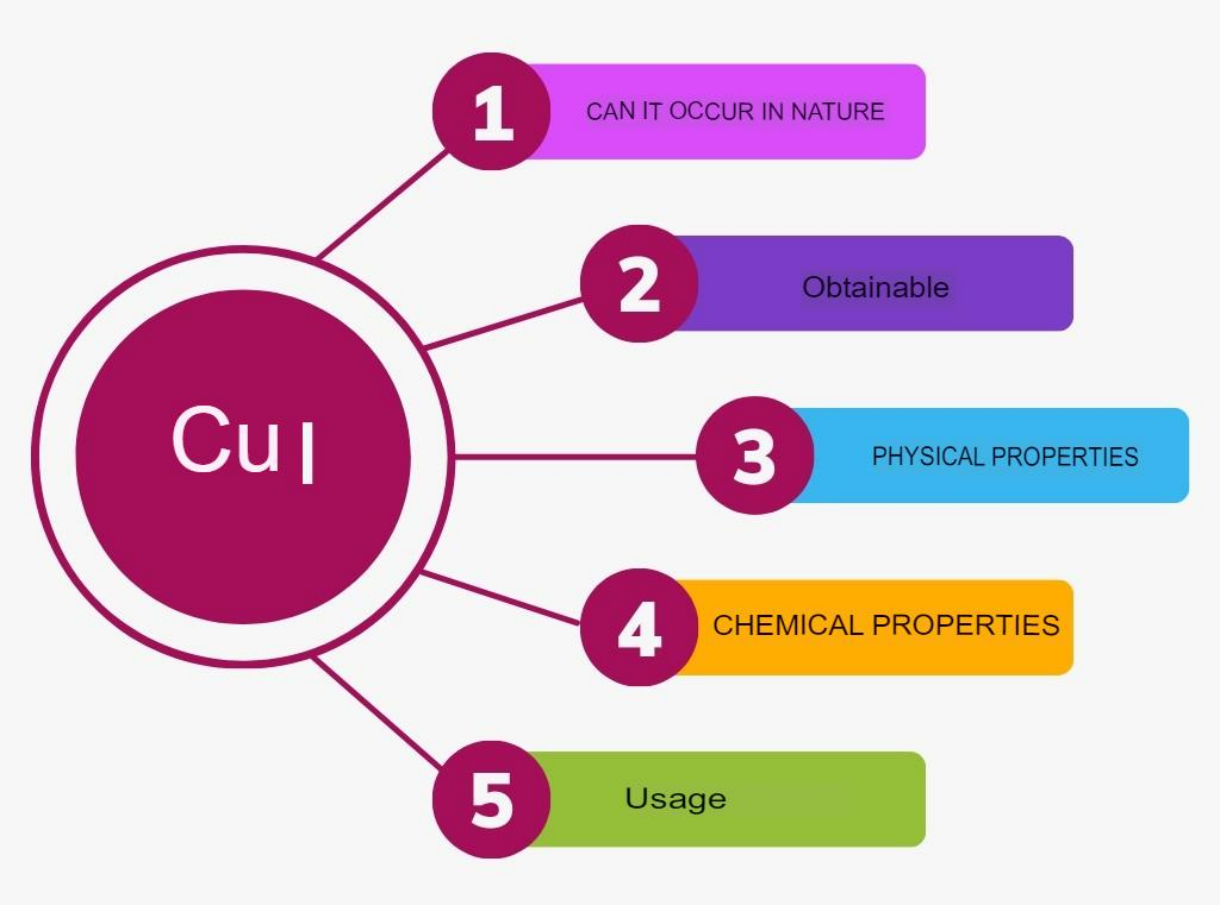
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The group is divided into three teacher-student-expert. Each group occupies these roles. "Teacher" group to ask questions and assignments on the topic,

Participants in the" reader "group should answer questions, participants in the" expert " group should check them. The expert evaluates in three sections:

- Exemplary
- Good
- satisfactory

at the end of the lesson, students of all groups are evaluated by a science teacher. This method can be used to strengthen the topic that has passed and when new knowledge is given, it can be mentioned that with the help of this method, the effectiveness of learning, attention of students will increase even more when the lesson process is carried out, I believe that working together as a team will also help to form the abilities



Structure of the method **"work in small groups"**

- The stages of the" work in small groups " method include:

- 1. The direction of activity is determined. On the topic, issues related to birbiri are determined.
- 2. Subgroups are defined. Trainees can be divided into groups from 3-6 people.
- 3. Small groups begin to complete the task.
- 4. Specific instructions are provided and directed by the educator.
- 5. Small groups make presentations.
- 6. Completed assignments are discussed and analyzed.
- 7. Small groups are evaluated.
- Advantage of the" work in small groups " method:

- leads to a good assimilation of the content of training;

- leads to improved communication skills;

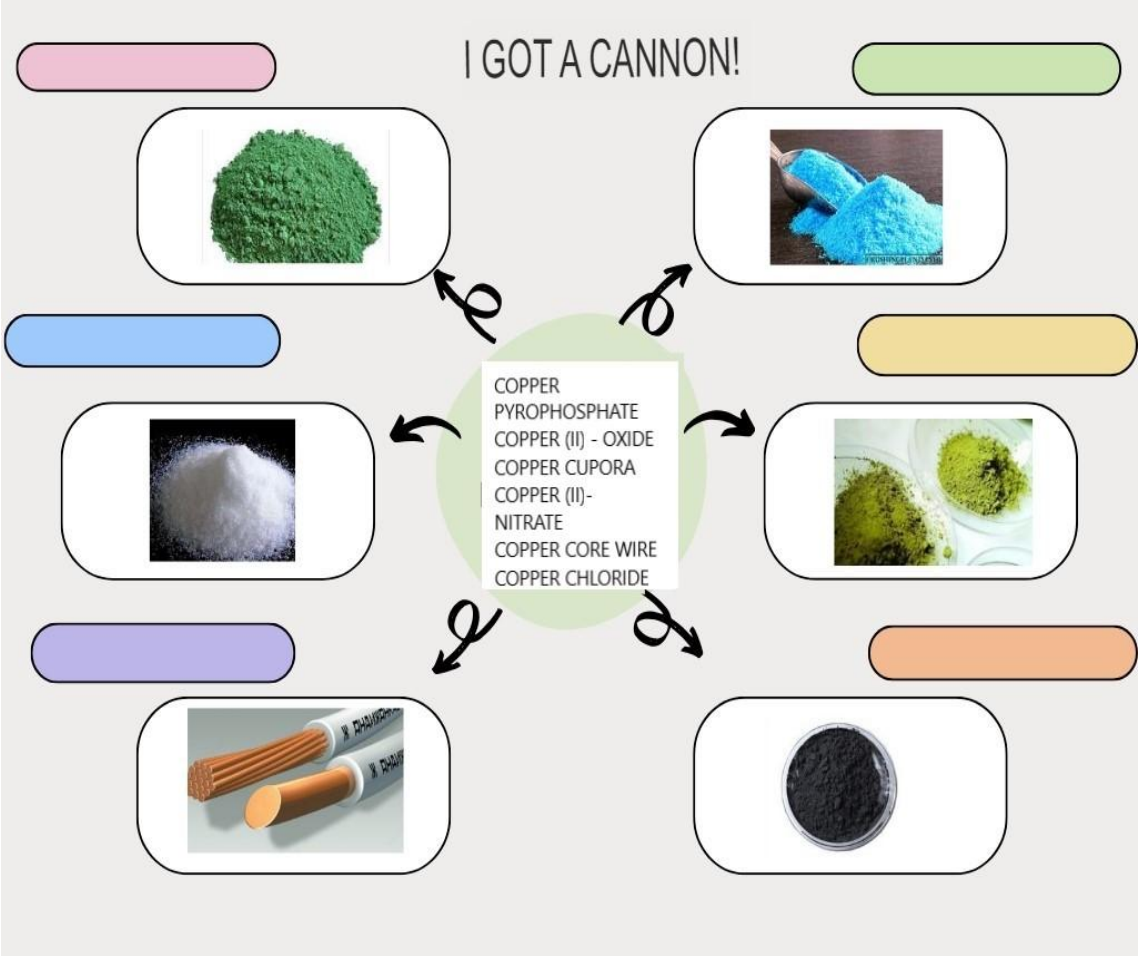
- there is an opportunity to save time; · all learners are involved. [Ishmuhamedow R.J. 2004]

- Small groups are formed. The topic will be covered. Assignment to Group 1; assignment to Group 2; assignment to Group 3; assignment to Group 4. Instruction and guidance by the teacher; discussion and analysis; presentation of Group 1, presentation of Group 2, presentation of Group 3, presentation of Group 4 are evaluated. In this:
- the possibility of self-and Intergroup assessment will be available. Disadvantages of the" work in small groups " method:
- because some small groups have weak learners, strong learners are also likely to receive low grades;
- the ability to control all learners will be low;
- negative intergroup rivalries may remain;

- a mutual conflict may arise within the group.

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Through these techniques, learners are able to express their knowledge of the given subject briefly and clearly. In addition, through this method, it is possible to evaluate learners on a specific topic. In doing so, the trainees can assess the answers that the other trainees in the group give to the questions they ask, and the educator can also objectively assess the trainees.

It is necessary to improve the educational process to the extent that it allows students to fully demonstrate their abilities and capabilities and spend all their energy on learning. The implementation of unconventional classes, which are associated with increasing the activity of the student instead of classes, which are associated with the activity of the teacher in the traditional way and trying to explain all the material, is one of the current pressing issues. Now, in the process of teaching, it is becoming important to effectively use all kinds of methods and teaching tools that do not bore students, direct them to thinking, to independent work. Teaching in an unconventional way, using new methods, pedagogical technologies, will further increase the interest in science in students, stimulate the emergence of independent thinking and the ability to speak independently.

- **The use of interactive techniques in the teaching of the topic" copper and its compounds " allows:**

- arouses interest in the acquisition of knowledge in students;

- encourages each participant in the educational process;

- has a positive effect on the psyche of each student;

- creates favorable conditions for careful assimilation of the material of the study;

- has a multilateral impact on students;

- evokes thoughts and attitudes on topics in students;

- forms vital skills, qualifications in students;

- ensures that the behavior of students is changed in a positive way;

In order to decide an interactive approach to the organization of education, educators need to be able to comply with a number of conditions. They are:

- Full coverage of all students in the community to the educational process

- to be taken.

- Taking into account the spiritual readiness of students for training.

- No higher number of students (small with 25-30 students

- working in groups is effective).

- The equipment of the study room (chairs are placed in such forms as a circle, an arch, a “live line”).

- A clear determination of the time to complete the task, provide materials, discuss the development of groups.

- Skillful attachment of students to small groups (equal amount of active, inactive students in each group)

Taking classes using interactive methods in education not only increases students ' interest in science, but also prepares them for social life with slow diligence, by working in small and large groups, being able to freely express their thoughts and having the skills to hear the opinion of others. Living in the current informational period, we will arrange for students a lesson that is not only qualitative and easy for the student to understand the topic ”copper and its compounds”, by applying various interactive methods to lesson processes based on the content of other topics, and by organizing classes using information communication technologies directly.

Interactive education in Republican educational institutions today
the following most popular technologies are used in the organization:

1. **Interactive methods:** "mental attack", " Keys-stadi "(or “training keys”),
", "Bliss-inquiry”, “working in small groups”, “modeling”, “creative work”, “attitude”, “plan”, "conversation", etc.

2. **Strategies:** "Boomerang", "Gallery", "Zigzag", "Zinama-zina", "musician", "rotation", "t-table", "rounded snow", etc.k.
3. **Graphic organizers:** "fish skeleton", "BBB", "conceptual table", "Venn diagram", "Insert", "cluster", " why?" , "How?", etc.

I am of the opinion that classes organized using such interactive methods are interesting for students and can be a factor in their more efficient assimilation of new knowledge.

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