TEACHING THE SUBJECT OF CHEMICAL REACTION RATE TO STUDENTS WITH THE HELP OF MODERN INFORMATION TECHNOLOGY

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Annotation: Methodology of teaching the subject of chemical reaction rate with the help of information technology. Such analyzes were carried out for the first time.

Key words: Chemical reaction, ICT, pedagogy, technology, laboratory. electronic textbooks

Аннотация: Методика преподавания предмета скорость химической реакции с помощью информационных технологий. Подобные анализы проводились впервые.

Ключевые слова: Химическая реакция, ИКТ, педагогика, технология, лаборатория. электронные учебники

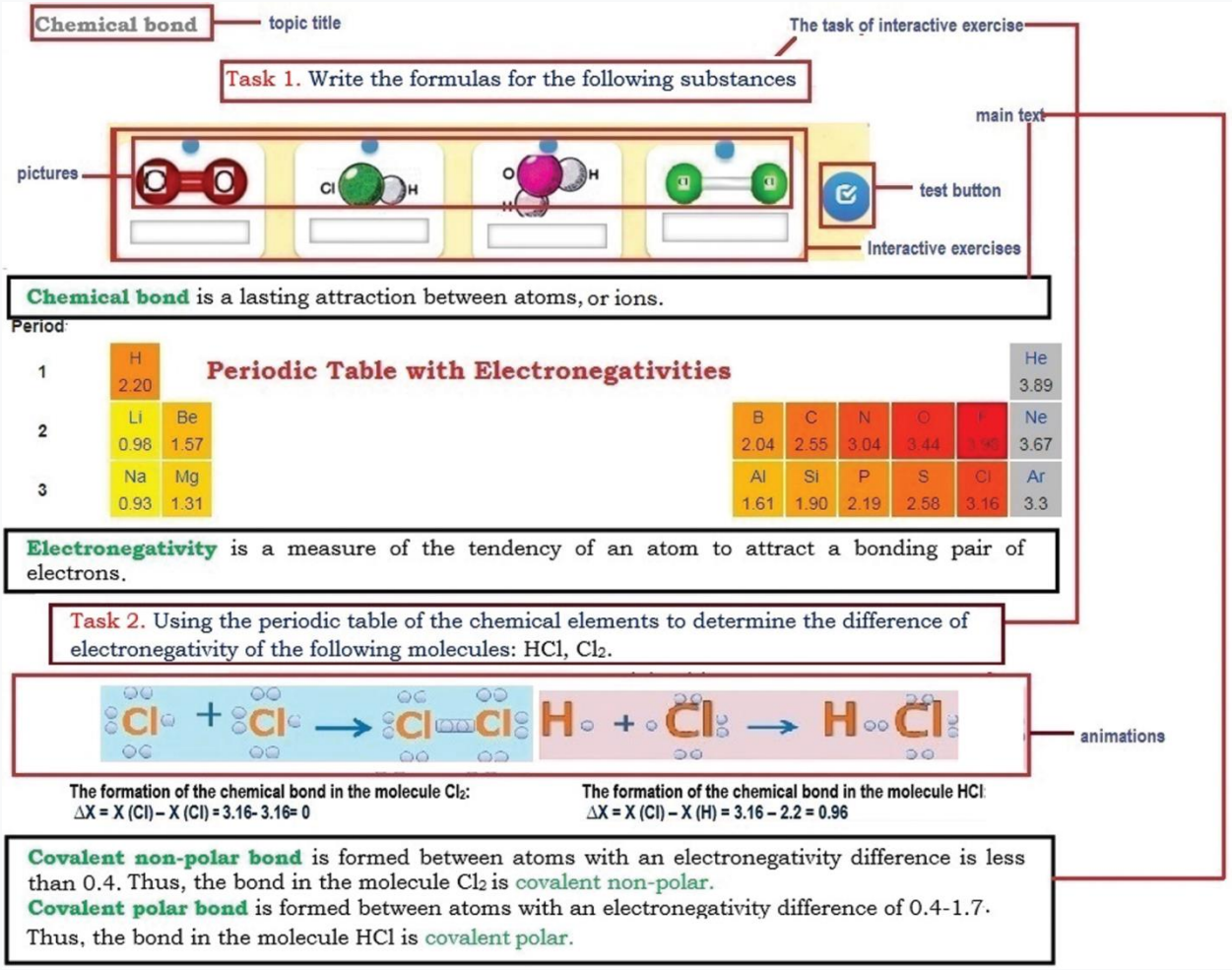
Introduction

One of the most important methodological principles that allows effective use of information and communication technologies (ICT) is the combination of computer technologies with traditional forms and methods. Modern electronic textbooks, virtual chemical laboratories, the Internet, and new educational tools are used in lessons on the rate of chemical reactions. The task of the teacher is to choose these resources in accordance with the content of educational materials, the age and psychological characteristics of schoolchildren. The use of ICT in the lesson should be goal-oriented and methodically based. So, today our life has become inseparable from the technology that provides information and communication processes, so there was a need to create ICT-based education.

Literature analysis and methodology

The main goal of this scientific research is to reveal the role and place of information and communication technologies in teaching the subject of chemical reaction rate with the help of information technology. Chemical reactions are divided into homogeneous and heterogeneous reactions. Homogeneous reactions take place in a homogeneous medium (for example, in a gas phase or in a solution). Heterogeneous reactions take place in different phases (for example, solid and liquid, solid and gas, liquid and gas).

The rate of chemical reactions is the number of collisions per unit volume per unit time. The reaction rate is usually characterized by the change in the concentration of one of the reacting or forming substances within a unit of time.



It consists in the development and analysis of recommendations on the use of information and communication technologies by the chemistry teacher in educational activities and preparation for the lesson.

Results

One of the urgent problems of modern education is preparing students for independent life, developing their interests, abilities, and realizing their life plans. The issues of individualization of education, activation of knowledge, development of students' creative abilities are very important as one of the conditions for their successful socialization. Based on the above tasks, a number of general requirements are imposed on modern classes: - arming students with conscious, deep and solid knowledge; - formation of strong skills and abilities that help students prepare for

life; - to increase the educational efficiency of education in the lesson, to form the personal characteristics of students during the educational process; - comprehensive development of students, development of their general and special characteristics; - to work with books, to learn independently and deepen or supplement knowledge, to acquire qualifications and skills, and to develop the ability to creatively apply the acquired knowledge in practice. To consider the general requirements that a high-quality modern chemistry course should meet, the following can be highlighted as the most important:

1. Using the latest achievements of chemistry, creating a lesson based on the laws of the advanced pedagogical and educational process;
2. Implementation of the lesson according to the optimal ratio of all didactic principles (scientific, demonstration, comprehensibility, etc.);
3. Use of interdisciplinary connection in order to form the natural-scientific imagination of students in the teaching of chemistry;
4. Connecting lesson materials with life (practical and daily activities of students), teaching chemical culture to work safely with substances, materials and chemical processes;
5. To ensure enrichment of the chemistry lesson with bright, interesting, effective theoretical and experimental facts;
6. Accurate design and planning of the results of each lesson;
7. Conducting demonstration and laboratory experiments in chemistry classes, as well as special practical training.

Conclusion

A modern teacher: explains the educational material in an interesting and understandable way; able to choose educational methods; according to positively supports cognitive activity; can have an effective impact on students; develops students, forms new ways of thinking.

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