

LESSON PLAN

CURRICULUM ARIA: Mathematics and Sciences

SUBJECT: Chemistry

CLASS: VII (13-14 years old)

UNIT OF LEARNING: Structure of atom

TYPE OF LEARNING: Consolidation of knowledge

TEACHER: PhD. Macovei Ada Alexandrina

General Objective: (according to the school curricula)

2. Investigating the way chemical substances or systems act.

Operational Objective:

2.2. Formulation of hypotheses regarding the structural characteristics of different atoms, ions and molecules.

Conditions:

- Heterogeneous classes with different styles and levels of learning, minimum 2 capable students of performance and minimum 2 students with assimilation / understanding or learning problems
- Students are accustomed to interactive methods, have acquired working skills, and are interested in the game.

Resources:

- Time: 50 minutes
- Content: textbook, curricula, PIP, Internet
- Procedures: individual work, in pairs, in large groups
- Materials: notebooks, blackboard, worksheets, colours, pens, paper.

Strategy:

- Methods and procedures: brainstorming, problem-solving, explanation, the learning pyramid
- Means: notebooks, whiteboard, cards, colours, felt pens, paper.

1. Introduction

The teacher provides the learning environment and presents the subject and the aim of the lesson. Introduces the problem - 5 minutes

2. Stage of individual work: students find their own solutions to the problem - 10 minutes

Ask the students to write the first 10 words that come to their mind when thinking about the atom.

Ask them to make at least 5 sentences using the words related to the structure of the atom and underline the words they have previously written and circle those they didn't use.

2. **Stage of pair work:** discussing the solutions, debate, and resulting in a unique solution – 5 minutes.

Ask the students to check the 5 sentences in pairs. A student tells his sentences to his pair who puts a valid sign for each true sentence. Then, the roles are reversed.

Then the students are asked to write the structure of the atom as complete and correct as possible with the help of the sentences they previously wrote, working in pairs.

4. Stage of large group work: the solutions are discussed until a single solution is accepted - 10 minutes.

Then there are formed groups of 6 students. The structure of the atom is checked and the answer is written on the flipchart. The students work on the sodium, magnesium, sulfur, chlorine, potassium and calcium atoms structures - each student will have a chemical element. Each correct answer, after the group checks and additional explanations are given, will be written on the flipchart.

5. Collective solution reporting stage- 5 minutes.

The leaders of the groups present the solutions and write them on the whiteboard - display of answers, comparison and evaluation.

Summarize the lesson - conversation, additional explanations, and self-evaluation.

6. Decision-making stage and evaluation

The teacher checks the displayed results.

Students 11, 12, and 13 in the school roll will shape the structure of the carbon, nitrogen and oxygen atoms and they will be evaluated.