

Lesson plan

<p>Teacher Katerina Mitrevska</p> <p>Year II – high school</p> <p>Topic/content Water</p> 	<p>Tasks: Student</p> <ul style="list-style-type: none"> - to recognize and discuss the building blocks of water, its composition, the way of chemical connection, its aggregate state, as well as the points of frost and boiling, solubility - to know the possibilities of using water for different purposes (for drinking, as a source of energy, for entertainment, etc.) - to determine some of the properties of water by performing experiments on density, solubility, pH and the like. - to facilitate the practical application of water saving considerations - to develop a positive attitude towards the use of water and water as a source of life <ul style="list-style-type: none"> * to be able to apply an active method of learning and research method; * to use literature and electronic media for obtaining information; * to enable the students to better apply the research process * to enable the students to perform self-evaluation and evaluation (assessment) of a project * to develop a positive attitude and ability for teamwork * to remember where and how much the science can help in preserving the healthy environment; * to develop ecological awareness for environmental protection
<p>Volume and order of the content</p> <ul style="list-style-type: none"> - Defining the problem / questions for the research / objectives formulation / project development guide - Developing a research plan - Data collection - Sorting and data analysis - Synthesize the data - Valuation of data - Presentation of the findings / poster, computer presentation, essay - Evaluation of the project 	
<p>Teacher's introductory information (5 min)</p> <p>The aim of the research is emphasized (explanation: the need to discover and use alternative sources of energy for the preservation of the environment)</p> <p>The teacher introduces the students with the goals of the lesson: researching for alternative renewable sources of electricity and explicitly explaining the research method that is going to be used.</p> <p>The students are made aware of the relevance and the elements and stages of the research process</p> <p>In co-operation with the teacher, students compile criteria for evaluating the project task</p>	<p>Teaching methods</p> <ul style="list-style-type: none"> ✓ Research ✓ Self-examination ✓ Presentation of the results - the product of the research ✓ Evaluation of project work
<p>Student activities (individual work)</p> <p>The student:</p> <ul style="list-style-type: none"> - Precisely defines the problem and develops research questions (in cooperation with the teacher) - Writes a research plan - Collects data (textbook, other literature, Internet) - Sorts and analyzes the data (in cooperation with the teacher) - Synthesizes and evaluates data / makes selection and creates a short product (poster / PPT presentation / essay) - Presents the findings/research results (presentation) 	
<p>Resources/teaching materials</p> <ul style="list-style-type: none"> - Analytical Assessment List (for project evaluation) with pre-defined descriptors - Self-assessment list for project task - Textbook, additional literature - Computer, Internet 	
<p>Teaching methods for determining what students already know</p> <ul style="list-style-type: none"> ✓ Self-examination 	<p>Teaching Methods for Assessing Student Learning (Assessment for Learning and Assessment of the Acquired knowledge)</p> <ul style="list-style-type: none"> ✓ Self-evaluation ✓ Peer evaluation ✓ Teacher evaluation
<p>Notes for:</p> <p>Successes:</p> <p>Challenges:</p> <p>Implications for future teaching and learning</p>	

Form for self-expressing and evaluating the project task

Student's name: _____ Class: _____ Date: _____

Work self-evaluation:

What have I tried to do:

What have I done:

What have I learned:

What am I proud of (related to this work):

What should I work on or what should I do differently next time:

Teacher comments:

Teacher's name: _____ Date: _____