



## Lesson Plan

### Chemistry and Professions

<b>Level, age of the students:</b>	14 – 16
<b>Subject:</b>	Chemistry.
<b>Subjects involved:</b>	IT, biology.
<b>Aims:</b>	To introduce jobs in which chemistry is required and to help students decide whether they could choose these courses. To help students choose the occupation that best suits their interests, knowledge, and skills.
<b>Suggested # of students per group:</b>	15 – 20
<b>Time of the main activity:</b>	15 minutes
<b>Material:</b>	computer, beamer, mobile phone
<b>Competences:</b>	Communication in mother tongue, science competences, digital competences, personal competences, social competences, environmental competences
<b>Preparatory actions if any:</b>	On the base of their studies so far, collect occupations for which, in their opinion, chemistry is needed / not needed. They must know the possibilities and applicability of their mobile phones and computers. They must know the application used.
<b>Expected results:</b>	Collect as many occupations as possible that require knowledge of chemistry.
<b>Expected difficulties:</b>	Due to the lack of knowledge, the students cannot imagine that an economist might also need knowledge of chemistry. It is difficult for them to decide which one they can imagine or exclude.
<b>Follow up if any:</b>	During the academic year, we pay extra attention to mentioning the career paths and occupations associated with each course material.





TIME	PROCEDURE (T: TEACHER; SS: STUDENTS)	METHOD
3'	<p><b>I. PREPARATORY ACTION</b></p> <p><b>Objective:</b> To get to know occupations that require chemistry</p> <ul style="list-style-type: none"> <li>⇒ T: Name occupations that require chemistry and occupations that do not require chemistry.</li> <li>⇒ D: In the given time frame, occupations that require and do not require chemistry are listed.</li> <li>⇒ T: If the students find it difficult to start listing, the teacher gives 1-2 examples.</li> <li>⇒ D: They continue listing.</li> <li>⇒ T: If the example given by the student is not correct, the teacher notes it and corrects it later.</li> </ul>	<p>Brainstorming</p> <p>Frontal work</p>
6'	<p><b>II. Getting to know some occupations that require chemistry:</b></p> <p><b>Objective:</b> Brief description of the tasks of some occupations that require chemistry</p> <ul style="list-style-type: none"> <li>⇒ T: You are coming now! Solve the crossword: enter the occupation based on the short description. As a solution, you will receive another occupation. What do you do and what competencies do you need?</li> <li>⇒ D: They solve the crossword puzzle (individually or in pairs).</li> <li>⇒ T: Check whether your solution is correct. What made you problem? What occupation did you get as a final solution?</li> <li>⇒ D: They tell their problems (if any), the final solution, its characteristics.</li> <li>⇒ T: Who could imagine that she/he would choose this occupation?</li> <li>⇒ D: They answer with raising their hands.</li> </ul>	<p><a href="https://learningapps.org/display?v=puz8ayng523">https://learningapps.org/display?v=puz8ayng523</a></p> <p>Individual or pair work</p> <p>Frontal work</p>





TIME	PROCEDURE (T: TEACHER; SS: STUDENTS)	METHOD
4'	<p><b>III. Occupations and qualifications</b></p> <p><b>Objective:</b> To encourage purposeful learning</p> <ul style="list-style-type: none"> <li>⇒ T: Open the link and group the occupations according to qualification. Then check your work.</li> <li>⇒ D: They solve the task in pairs.</li> <li>⇒ T: Which occupation caused problems? Which profession do you think is in short supply? In which profession should environmental protection be taken care of?</li> </ul>	<p><a href="https://learningapps.org/display?v=pjywptkr323">https://learningapps.org/display?v=pjywptkr323</a></p> <p>Group work</p> <p>Frontal work</p>
2'	<p><b>IV. CLOSING ACTIVITY</b></p> <p><b>Objective:</b> Getting to know new occupations during the school year.</p> <ul style="list-style-type: none"> <li>⇒ T: The topic cannot be closed here! Try to get to know as many professions and occupations as possible, so that your career choice becomes easier! In the course of the year, we will also mention chemistry-related classes in connection with individual study materials.</li> <li>⇒ D: They will tell their questions they may have.</li> </ul>	<p>Frontal work</p>

