



Learning Scenario

Workshop 2: PBL, online quizzes and logical tasks

LearningScenario Title	Spatial orientation
Course/ Grade	Science 3rd grade of primary school
LearningOutcomes	<p>General Learning Outcomes</p> <ul style="list-style-type: none"> • Determine the cardinal and intermediate directions and know how to note them with abbreviations • Name the cardinal directions where sun rises and fall and therefore manage the orientation • Determine viewpoint and horizon, orientation by compass, sun or other signs on the ground • Manage the topographic map or town map • Distinguish the meaning of colour hues on the map <p>Specific Learning Outcomes oriented on Algorithmic Thinking</p> <ul style="list-style-type: none"> • According to the adopted algorithm, create a map to find the hidden treasure
Aim, Tasks and Short Description of Activities	<p>Aim: revise and systematize the processed teaching material (orientation in space)</p> <p>Tasks:</p> <p>a) Identify the viewpoint, the horizon, the plan, the map, to associate the image and the word, to write abbreviations of the cardinal and intermediate directions, to determine the cardinal points from the current position of the sun, to orient by the compass, to determine the meaning of color on the map and to describe the relief, explain the legend on the map, manage the map and plan and find the hidden treasure, according to the algorithm create a treasure map.</p> <p>b) to practice spatial orientation, develop logical thinking, conclusion, memory</p> <p>c) To promote conscientiousness in work, to develop patience, persistence and tidiness in performing tasks, to develop an interest for understanding natural phenomena and teaching subject Science.</p>



	SHORT DESCRIPTION OF ACTIVITIES	
	<ol style="list-style-type: none"> 1. Memory game 2. Review with Kahoot 3. Spatial orientation – treasure map (group work) 4. Creating a map (work in pair) 5. Worksheet Wizer 	
Keywords	Cardinal and intermediate directions, viewpoint and horizon, town map, topographic map	
Correlation and Interdisciplinarity	Art class – colour hues	
Duration of Activities	90 minutes	
Learning and Teaching Strategy and Methods	Dialogical method Demonstration method Problem solving method Game Based learning	
Teaching Forms	Individual work, frontal teaching, work in pairs, group work	
Tools	Kahoot! tools and Kahoot! quiz, Wizer, Learning Apps, Match the memory	
Resources/materials for the Teacher	Kahoot! tools, Match the memory, Wizer, LearningApps for preparing quiz, memory game and interactive worksheets	
Resources/materials for the Students	Kahoot! quiz, Match the memory, Wizer, LearningApps for solving quiz, memory game and interactive worksheets on iPad	
Teaching Summary	<p>IMPLEMENTATION OF ACTIVITIES</p> <p>1. INTRODUCTORY PART</p> <p>A game of Hangman (frontal work)</p> <p>Using the game, reach the keywords and topics of today's class (orientation). Repeat what it means to be oriented, ie. spatial orientation.</p> <p>2. MAIN PART</p> <p>- Memory (individual work)</p> <p>Visualize the basic concepts: viewpoint, horizon, map, plan.</p> <p>- Kahoot quiz (individually solve the quiz, frontal analysis of tasks)</p> <p>Revise the processed content.</p>	<p>5 min</p> <p>5 min</p> <p>15 min</p>



	<p>- Spatial orientation (work in pairs)</p> <p>Select the viewpoint.</p> <p>Determine the cardinal and intermediate directions on school playground using the Sun.</p> <p>Orient by the compass, follow the map with instructions, find the hidden treasure.</p> <p>Analysis and evaluation of activities.</p> <p>- Making a treasure map (group work)</p> <p>According to the algorithm that followed, create a map that will lead the other group to the hidden object.</p> <p>3. FINAL PART</p> <p>- Wizer worksheet</p> <p>Solve worksheet for self assessment.</p> <p>Set homework - determine the cardinal and intermediate directions in your bedroom / living room. Draw the map of that room.</p>	<p>20 min</p> <p>30 min</p> <p>10 min</p> <p>5 min</p>
Annexes	<p>Learning scenario in LePlanner https://beta.leplanner.net/#/scenario/5bd5f4fca7da50be4d75dc32 GAME OF HANGMAN https://learningapps.org/display?v=pxbx2d8o518 STAPLE https://matchthememory.com/orijentacijakika TREASURE HUNT https://learningapps.org/display?v=p05tz96fn18 Kahoot! https://create.kahoot.it/create#/edit/0196a25f-66c4-4973-8712-13bdcfeafdc6/done Wizer https://app.wizer.me/learn/OY2KVJ</p>	
Examples and game references	<p>Learning Apps https://learningapps.org (15.12.2018.) Match the memory https://matchthememory.com (15.12.2018.) Kahoot! https://create.kahoot.it (15.12.2018.) Wizer https://app.wizer.me (15.12.2018.)</p>	

