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# Title of the STEPAM Unit: Safeguarding Exercise

AUTHORS (NAMES /SCHOOL / COUNTRY): EXPERIENCE WORKSHOP, JAGODINA

| RELATED SUBJECTS | AGE GROUP OF THE STUDENTS | TOTAL ACTIVITY TIME | LEARNING OBJECTIVES DURING THE LESSON SUBJECT-SPECIFIC COMPETENCIES | LEARNING OBJECTIVES AFTER THE LESSON |
|---|---|---|---|---|
| Science, Mathematics, Physical Education, Arts | 1-4 grade (6 to 11 years old) | 90 minutes | Learning about different types of settlements and cultures.<br>Student relate math grids to grids their use in math and to read the infromation in charts.<br>Developing of spatial relations (left, right, forward, backward, up, down)<br>Learning to use google maps<br>Drawing using different perspecives<br>Development of movement speed, agility and coordination. | Students can recognizes different types of settlements and cultures.<br>Students use their knowledge of the square grid for practical application.<br>Students distinguish different view perspectives<br>The students improved their coordination and concentration |

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OVERVIEW: TOPIC & PURPOSE

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## ACTIVITY PREREQUISITES -

## STEAM ELEMENTS

| | |
|---|---|
| ELEMENT 1:<br>context presentation | What are the characteristics of shadows in everyday life? What are the conditions for the formation of shadow and penumbra?<br>Using shadows in art. |
| ELEMENT 2:<br>creative design | Creating characters and objects for shadow theater<br>Using different materials in order to boost the creativity in children.<br>Using different materials in construction techniques.<br>combining real objects, their shadows and textures to create static art installations. |
| ELEMENT 3:<br>emotional and social learning | Learning cooperation and communication skills through working in groups.<br>Experiencing focus and concentration during the building process.<br>Experiencing focus and concentration during the exercises. |

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## STEAM SUBJECT ELEMENTS

| STEAM SUBJECTS | SCIENCE | TECHNOLOGY | ENGINEERING | Physical Education | ARTS | MATHEMATICS |
|---|---|---|---|---|---|---|
| SHORT INTRODUCTION TO RELATED SUBJECT ELEMENTS | Magnetism, properties of magnets, magnetic force and the use of magnets in everyday life. | Using electronical devices (Mobile phones or computers) with app. | Creation of magnet sculpture. Use the magnetic biulding sticks set. Creation of fishing stick with available materials. | Two is a company three is a crowd. Find a pair/pair tag Double leg sticks Musketeers Migration | Painting with magnets. Creation of structure | Math equation, repeating rules and solving textual math problems |

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## SYLLABUS

| LESSONS | SUBJECTS | TOPIC OF THE UNIT | LEARNING OBJECTIVES DURING THE LESSON: SUBJECT SPECIFIC COMPETENCIES | LEARNING OBJECTIVES AFTER THE LESSON: STEAM COMPETENCIES |
|---|---|---|---|---|
| 1 | Science, Mathematics, Engineering, & Arts. | **Types of settlements, location, (addresses, street and number)**<br>Using a square grid for moving and translating object<br>Drawing and presenting objects from a story perspective. | Students learn content about settlements. learn about the basic elements of the settlement plan<br>Students develop spatial relations and orientation.<br>Students use how to present different view perspecive.<br>Students construct objects for the map. | Students know how to use a map to navigate in space.<br>Students use their knowledge of the square grid for practical application.<br>Students use how to present different perspectives<br>Students learn how to design and read map. |

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| 2 | **Physical education,**<br>Technology<br>**Mathematics,** | Development of motor skill (speed, agility and coordination). Running exercise.<br>Using a google map | The students are physicaly active and they develop their physical skills.<br>Students determine<br>knowledge about even and odd numbers, logical sequence, knowledge of geometry (basic knowledge about lines) | Students are more active and healthy. Improving their motor skills – speed and agility.<br>Students learn to organise relevant information on the math grid<br>Student learn how to use google map features in application. |

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## INSTRUCTIONAL PLAN BY LESSON (COPY AS MANY TIMES AS NEEDED)

## LESSON Grade 3-4 Science, Engineering, Physical Education, Art (Language) and Mathematics

| TIME PLAN | TEACHING & LEARNING ACTIVITIES | MATERIALS | LEARNING OBJECTIVES |
|---|---|---|---|
| INTRODUCTION **(5 minutes)** | In this lesson, introduce disasters sensitively. Begin with a discussion on types of disasters, their causes, and impacts. Incorporate video clips showcasing real-life scenarios. Use visuals and stories to engage students. Emphasize preparedness and safety measures highlighted in the videos. | Attached PDF slides: Slide nr. 2-3. **Video** https://www.youtube.com/watch?v=neoz6usOmPo https://www.youtube.com/watch?v=HaEmIakO7f4 https://www.youtube.com/watch?v=zGY-48OzjyM | |
| LEARNING ACTIVITIES **(60-70 minutes)** | **Students utilize computers and mobile phones to engage in interactive learning** | **Symbol of hazards>PPT** | |

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| | **tasks. Present educational videos showcasing symbols of hazardous materials in a child-friendly manner. Facilitate discussions on the meanings of each symbol and potential dangers. Reinforce learning through interactive quizzes and group activities. Conclude with a review of key concepts. (approx. 10-15 min)**<br><br>**After the lesson, students prepare for physical education. They engage in the 'Radioactive Ball' game from the 365 Games app. Using ropes, they collaborate to move the ball, promoting teamwork and coordination. This fun activity reinforces the importance of cooperation and physical fitness. During the 'Radioactive Ball' game, emphasize safety as students cannot touch the 'radioactive' ball directly, only using jumping ropes. Encourage students to creatively engineer connections with ropes to move the ball safely. This activity integrates physical education with engineering, fostering teamwork, critical thinking, and problem-solving skills.** | Attached PDF slides: Slide nr.4 -6. Group work. Depending on the number of groups 4-6 students.<br><br>Apps for hazards symbols<br>https://play.google.com/store/apps/details?id=gov.nih.nlm.erg2012<br><br>https://www.safetyandhealthmagazine.com/articles/9561-match-the-pictogram-to-the-hazard | |

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| | (approx. 30 min).<br><br>As part of the teacher's preparation, introduce students to the topic of material disposal in nature. Discuss the decomposition timeframes of everyday materials like plastics. Emphasize the longevity of plastic waste and its environmental impact. Contrast decomposition rates of organic and synthetic materials. Highlight the importance of sustainable consumption and waste management practices.<br><br>Introduce students to the topic of material disposal in nature. Discuss the decomposition timeframes of everyday materials like plastics. Emphasize the longevity of plastic waste and its environmental impact. Contrast decomposition rates of organic and synthetic materials. Highlight the importance of sustainable consumption and waste management practices.<br><br>Mathematical tasks | | |

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| **WRAP-UP & EVALUATION (15-20 minutes)** | **In the final part of the class wrap-up, shift focus to art. Task students with designing symbols using various art techniques, such as collage. Encourage creativity in depicting the hazardous material symbols learned earlier. Emphasize the importance of visual communication in raising awareness about safety and environmental issues. Conclude with a gallery walk to admire and discuss students' artwork.** | **For the art activity, gather materials such as: Colored paper or cardstock, Scissors Glue or adhesive, Markers or pens for embellishments and details, Magazines or newspapers for collage elements (optional), Paints and brushes for painting (optional), Any other decorative materials like glitter, sequins, or ribbons (optional).** | Learning about how to create shadow and penumbra using light and different materials. They learn to work and cooperate in a group. They learn educational things depending on the specific play. |

## EVALUATION PLAN BY LESSON

| LESSON | EVALUATION CRITERIA | EVALUATION METHOD |
|---|---|---|
| **1, 2** | | |
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# HOMEWORK

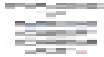
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## NOTES –

## Picture 1



## Picture 2

## ACTIVITY SHEETS TO BE LINKED -

## EVALUATION MATERIALS TO BE LINKED -

## REFERENCES / SUPPORTING MATERIALS TO BE LINKED

PDF / PPT slides:

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