

Lesson Plan: MAKE A POSTER

Teacher: ANA BELÉN ORCAJADA

Subject: NATURAL SCIENCES

Title : Lesson	Time : 2 class periods (90 minutes each)
Subject : NATURAL SCIENCE	
Aim: <ul style="list-style-type: none">• To create awareness about the biodiversity of the Menor Sea and the importance of conserving its species• To develop students' skills in research, design, and communication through the creation of a poster.• To foster computational thinking by decomposing the task, recognizing patterns in species, abstracting key information, and designing an effective poster.	
Key CS elements: decomposition, pattern recognition, abstraction, algorithm design	
Age group : 2 ^o secondary: 13 years old	
Learning situations: classrooms	Activity type : creation of a poster
Resources : <ul style="list-style-type: none">• Internet access• Reference materials on marine species• Drawing materials (paper, markers, colored pencils, etc.)• Computers with graphic design software (optional)	
Learning development:	
Introduction (15 minutes): <ul style="list-style-type: none">• Begin by discussing the importance of marine biodiversity and the Menor Sea's ecological significance.• Introduce the task: designing a poster showcasing the most relevant species found in the Menor Sea, with a focus on those at risk or in danger.	
Decomposition (20 minutes): Break down the task into smaller components: <ul style="list-style-type: none">• Researching species found in the Menor Sea.• Identifying species at risk or in danger.• Selecting relevant information for the poster.• Planning the layout and design of the poster.	
Pattern Recognition (15 minutes): Discuss common patterns and characteristics of marine species found in the Menor Sea. <ul style="list-style-type: none">• Explore how certain species interact with their environment and each other.• Identify patterns in the threats faced by species, such as pollution, habitat loss, and overfishing.	
Abstraction (20 minutes): Abstract key information about selected species, including: <ul style="list-style-type: none">• Scientific names• Habitat and distribution	

- Threats and conservation status
- Determine the essential elements to include on the poster to effectively communicate information about the species.

Algorithm Design (20 minutes):

Develop a plan for designing the poster:

Step 1: Identify the Objective:

- Determine the purpose of the poster: to showcase the most relevant species found in the Menor Sea, with a focus on those at risk or in danger.

Step 2: Research:

- Gather information about the marine species inhabiting the Menor Sea, including their characteristics, habitats, threats, and conservation status.
- Identify species that are particularly important or threatened.

Step 3: Select Key Species:

- Choose a selection of species to feature on the poster, prioritizing diversity and relevance.
- Focus on species that are at risk or in danger, as well as those with unique characteristics or ecological significance.

Step 4: Gather Visual Assets:

- Find high-quality images or illustrations of the selected species.
- Ensure that the visuals accurately represent each species' appearance and habitat.

Step 5: Plan Layout and Design:

- Sketch the layout of the poster, considering the arrangement of species, text, and images.
- Allocate space for each species, including room for key information and visual elements.
- Decide on the overall aesthetic, including color scheme, fonts, and graphic elements.

Step 6: Organize Information:

- Compile relevant information for each species, such as scientific name, habitat, threats, and conservation status.
- Condense the information into concise, easy-to-understand points.
- Determine the order in which species will be presented on the poster.

Step 7: Create Content:

- Write informative captions or descriptions for each species, highlighting key facts and conservation messages.
- Ensure that the content is engaging, accurate, and accessible to the intended audience.

Step 8: Design Poster:

- Use graphic design software or traditional art materials to create the poster.
- Incorporate the planned layout and design elements, including text, images, and graphics.
- Pay attention to visual hierarchy and balance to ensure clarity and visual appeal.

Step 9: Review and Refine:

- Review the completed poster to check for accuracy, consistency, and readability.
- Make any necessary revisions or refinements to improve the overall quality and effectiveness of the poster.

Step 10: Finalize Poster:

- Once satisfied with the design, finalize the poster for printing or digital distribution.
- Ensure that the poster meets any size or format requirements and is ready for presentation.

Step 11: Present Poster:

- Display the poster in a prominent location where it can be viewed by the intended audience.
- Prepare to present the poster, providing additional context and insights about the featured species.

Step 12: Evaluate and Reflect:

- Reflect on the process of creating the poster and the effectiveness of the final product.
- Consider feedback from peers or instructors and identify areas for improvement in future projects.

Assessment:

- Evaluate students based on their research, poster design, and presentation skills.
- Assess their ability to decompose the task, recognize patterns in species, abstract key information, and design an effective poster.
- Provide feedback on creativity, accuracy of information, and clarity of communication.

Implementation:

Implementation (2 class periods):

- Students conduct research on species found in the Menor Sea, focusing on those at risk or in danger.
- Using their research findings, students design and create their posters, following the outlined plan.
- Encourage collaboration and peer feedback throughout the design process.

Presentation (10 minutes):

- Students present their posters to the class, explaining the species featured, their importance, and the threats they face.
- Facilitate a discussion on the posters, highlighting the diversity of species in the Menor Sea and the significance of conservation efforts.

Conclusion:

- Reflect on the process of designing the posters and the importance of raising awareness about marine biodiversity and conservation.
- Encourage students to share their posters with the school community or display them in relevant public spaces to further spread awareness.

Notes: WEB TO CHECK SPECIES

SPANISH

<https://canalmarmenor.carm.es/inventario-ecologico/>

<https://marmenormarmayor.es/mar-menor/fauna-marina-mar-menor/peces.html>

<https://galpemur.es/wp-content/uploads/2020/09/Las-especies-comerciales-en-la-laguna-del-mar-menor.pdf>

<https://www.asociacionanse.org/proyectos/conservacion-del-mar-menor-y-su-entorno/2/>

ENGLISH

<https://canalmarmenor.carm.es/wp-content/uploads/2020/07/LIBRO-MARMENOR-INGLES-hojas-sueltas-web.pdf>

<https://www.birdingplaces.eu/en/birdingplaces/spain/las-encanizadas-del-mar-menor>