Unplugged Activity

Title: HERITAGE EXPLORERS

Educational level: 2nd ESO
Curricular areas: Geography and History
Timing: 1 period - 45 minutes (3rd term).

Summary

"Heritage Explorers" aims to develop a game to locate important monuments of Madrid on the metro map, answer questions about their history and heritage, and foster decision-making and map navigation skills using monument and route cards. In addition to subject-specific content related to the city's heritage and geography, students will engage in computational thinking in a playful way by organizing decision-making, applying simple algorithms to real processes, and working with sequences.

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Aims

- Expand vocabulary, comprehension, and oral expression through a structured game.

- Foster the ability to break down a problem into smaller parts, such as identifying a route on the map within specific categories (progress cards).

- Help students recognize order and sequence within a complex and real process, like the phases of a metro map.

- Navigate the map by following routes between monuments.

- Answer questions to "collect" monuments.

- Choose the best paths to visit more monuments in the shortest time possible.

- Reinforce concepts of logical reasoning and decision sequences, developing computational thinking skills.

- Develop the ability to understand and follow clear yet complex instructions.

- Promote teamwork and effective communication.

Key competencies to develop: Linguistic communication competence; mathematical competence and competence in science and technology; digital competence; personal, social, and learning-to-learn competence; citizenship competence.

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Steps to follow

1. **Preparation (5 min)**
   The monument cards are placed in their real locations. The students will be divided into groups of 4 or 5.
   Each team receives a route card (e.g., From the Temple of Debod to the Plaza Mayor).
   The pieces are distributed, and a starting station is chosen.
2. **Exploration and Questions (30 min)**
   Movement:
   On their turn, a team can move up to two stations. They can change lines if they are at an exchange station. To continue advancing, they must reach their destination and answer the monument's question.

   Monuments and Questions:
   Upon reaching the destination monument, they must answer the question on the monument card. If they answer correctly, they keep the monument card and receive a new route card. If they answer incorrectly, another team can try on their turn.

   Strategy:
   Teams can decide which routes to take to optimize their time. They can try to collect extra monuments if they have time left.

3. **Final and Winners (10 min)**
   The team with the most monument cards wins. A debriefing is held to explain which monuments they visited and their importance.

Suggestions

In a preliminary session, introduce the concepts of heritage and urban planning in Madrid to ensure students understand these topics, allowing the activity to serve as reinforcement and expansion. During the first 20 minutes, explain the historical process of the city's urban expansion and its key phases to provide context for the proposed game.

Observe each group's participation throughout the game. Review the decision-making process and its connection to computational thinking.

Encourage students to reflect on their work and reinforce learning with complementary activities related to the topic. Students can also create their own monument and route cards to expand the game.

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Resources

- **Human:** Teachers and students
- **Material:** 10 itinerary cards, 10 monument cards and a board.

Space: classroom.

Type of activity: Group activity. Gaming.

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Click on the image to get the materials:

Board:

Monuments:

Itineraries:

Variations and Extras

Wildcard Cards: Add special cards (e.g., "Free Transfer" to switch metro lines without being at an interchange station).

Increased Challenge: Some questions can require multiple answers or ask teams to justify their response with historical facts.

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Assessment

Four key assessment criteria have been designed to evaluate team performance, with corresponding descriptions for each evaluation level.

Assessment Criteria	4 Excellent	3 Very good	2 Satisfactory	1 Needs improvement
Response Accuracy	Answers all questions correctly without errors.	Answers most questions correctly, with few errors.	Answers some questions correctly, but makes several mistakes.	Makes many mistakes or does not answer correctly.
Route Strategy	Optimizes time by choosing short and efficient routes.	Uses reasonable routes, but some could be more efficient.	Some routes are inefficient, reducing the available time.	Does not plan routes well, wasting a lot of time.
Teamwork	Collaborates exceptionally, discussing and making decisions together.	Collaborates well, though some decisions are not fully discussed.	There is little collaboration, with unilateral decisions affecting performance.	There is no collaboration, and decisions are made without consensus.
Number of Monuments Collected	Collects all possible monuments, making the most of the time.	Collects most monuments but leaves some unexplored.	Collects few monuments and does not take advantage of all opportunities.	Collects very few monuments or fails to visit any.

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Computational Thinking

Logic (prediction and analysis): thinking to make predictions, solve problems and make decisions based on available information.

Algorithms (steps and rules): is a step-by-step process that solves a problem or completes a task.

Decomposition (breaking down into smaller parts): breaking down problems into smaller and more manageable parts, which are easier to understand and solve.

Patterns (recognise and use similarities): recognising similarities or patterns in problems or data, which means come up with solutions quickly and effectively.

Abstraction (delete unnecessary details): simplifying things in a problem hiding unnecessary details or aspects to focus on those which are relevant and essential.

More information

QR codes to materials:

Board:

Monuments:

Itineraries:

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