**Learning scenario with MARG - Template**

|  |  |  |
| --- | --- | --- |
| PART 1: General information | | |
| Title of the scenario: | **Endangered Species** | |
| Keywords: | Global warming, endangered animals and plants, preserving wildlife | |
| Name(s) of the scenario’s creator(s): | Monica Benghe, Mircea cel Batran Secondary School, Romania | |
| [Creative Commons License](https://creativecommons.org/licenses/?lang=en) of the scenario: | Attribution | Attribution-NoDerivs |
| Attiribution-ShareAlike | Attribution-NonCommercial |
| Attribution-NonCommercial-ShareAlike | Attribution-NonCommercial-  NoDerivs |
| Estimated duration of the scenario’s activities: | 2 x 50 minutes | |
| Age range of learners: | 10-13 years old | |
| Learners’ special characteristics: (i.e. immigrants, special needs) | None | |
| Learning subject based on your curriculum to which the scenario relates: | Environmental education | |
| To which Sustainable Development Goal (s) does the scenario relate to : (highlight it/them) | [ ] No Poverty | [ ] Industry, Innovation and infrastructure |
| [ ] Zero Hunger | [ ] Reduced Inequalities |
| [ ] Good Health and Well-Being | [x] Sustainable Cities and Communities |
| [x] Quality Education | [x] Responsible Consumption and Production |
| [ ] Gender Equality | [x] Climate Action |
| [x] Clean Water and Sanitation | [x] Life Below Water |
| [x] Affordable and Clean Energy | [x] Life On Land |
| [ ] Decent Work and Economic Growth | [ ] Peace, Justice and Strong Institutions |
|  | [ ] Partnerships For The Goals |
| Which 21st century skill(s) does the scenario involve:  (highlight it/them) | [x] Information and data literacy | [x] Critical thinking, |
| [x] Communication | [x] Active citizenship |
| [x] Collaboration | [ ] Respect for differences |
| [x] Problem solving |  |

|  |  |
| --- | --- |
| PART 2: Learning outcomes of the scenario | |
| In terms of knowledge | The learner knows and understands:   * What is the difference between vulnerable, endangered and extinct species? * What are the most endangered species on Earth? * What is the role of zoos in preserving species? |
| In terms of skills | The learner is able to:   * Distinguish between natural vs human causes of animal extinction |
| In terms of competences | The learner is able to:   * Take simple decisions in order to avoid or slow down the extinction of animals due to human behavior. |

|  |  |
| --- | --- |
| PART 3: Description of the game | |
| Narrative description of the game plot: | Every year, more and more animals are in serious danger of going extinct! But have you ever stopped and wondered, what causes animal extinction? Is it still possible to save some of them? While visiting the zoo, guided by the virtual zoo keepers, students discover the role of the zoo in preserving species, learn about the endangered species and the impact of the human society on the wild life. |
| Game objectives: | Located in the Trivale Park, the Piteşti Zoo has an area of 12 hectares.  There are nearly 70 species of animals, birds, reptiles, parrots and fish in the Zoo. To complete the game, students have to answer correctly the question: How many animals are living in the local Zoo in Pitesti?  In order to find out the correct number, students visit the 4 areas inside the zoo and collect information from the digital material they received on their mobile devices. and from the physical environment.  Each area is followed by a quiz. If they answer correctly, they receive a clue.  The 4 clues represent the number of animals living in the local Zoo of Pitesti. |
| Does the scenario refer to a specific location? If yes, specify. If no, write everywhere. | Yes, at the local Zoo in Pitesti, Romania |
| Characters: | The teacher, the zoo keepers, extinct and endangered animals |
| Scenes: | The game consists of five scenes/places of interest:   1. the zoo keeper’s area 2. the bird’s area 3. the terrarium 4. the big mammal’s area |
| Type of work: Individual/ collaboration | Students play the game in teams of three |
| Does the game involve different player roles? If yes, specify. | No |

|  |  |  |
| --- | --- | --- |
| PART 4: Description of the learning scenario activities | | |
|  | **Learning settings** | **Estimated time** |
| Before the game: | Students are given instructions about how to use mobile devices and how to play the MARG. They are divided in small groups. | 5’ |
| During the game: | The game takes place in the local Zoo. Just before the entry, the teacher asks the students how many animals are living in the local Zoo? In order to find out the precise number they are invited to visit the zoo and learn more about endangered species. During the game, students visit 4 areas /scenes. More specifically:  **Scene 1: the zoo keeper’s area**  At the entrance to the Zoo, virtual zoo keepers explain the role of zoos in the conservation of species. Students learn about vulnerable, endangered and extinct species and respond to a questionnaire to receive the first clue.  **Scene 2: the bird’s area**  Students learn about endangered birds and the causes that led to their extinction, (for example, deforestation). They are asked to observe the names of the birds and to write down information about their habitat and living area. In the end, they respond to a quiz about the impact of deforestation and climate change on birds and, if correctly, they get the second clue.  **Scene 3: the terrarium**  In this area, students observe reptiles, fish, amphibians and insects. They learn about their role in the ecosystem, the causes that lead to their extinction. They're asked to read the information about what these animals feed on. Then they get a quiz about water pollution and the human impact on animals living in the water (fishing).  **Scene 4: the big mammal’s area**  In this area, students observe animals from Romania such as bear, wolf, lynx, Carpathian deer, and animals from Asia, Africa, America: monkeys, lion, tiger, etc. They learn about endangered species of mammals and they are invited to reflect on the vulnerability of these animals due to human activity such is agriculture, excessive hunting and pollution. At the end, they get a questionnaire and the last clue they need to answer the question and complete the game. | 45’ |
| After the game: | After the game, using the information they collected during the visit, students debate pro and against keeping animals in a zoo. | 50’ |
|  | **Total**: | 100’ |

|  |  |
| --- | --- |
| PART 5: Prerequisite knowledge and supportive material | |
| Learners’ prerequisite knowledge: | Basic knowledge of using a mobile device. Basic knowledge about wild animals. |
| Infrastructure/ equipment needed for implementing the scenario: | Mobile devices with data-internet connectivity |
| Other learning resources needed: | Video about endangered animals  For example: <https://www.youtube.com/watch?v=yFH4AtCMJXE> |

|  |  |
| --- | --- |
| PART 6: Approach towards the assessment of the learning outcomes | |
| Learners’ assessment approach: | ✓ In-game quizzes  ✓ Feedback from students  ✓ Questionnaire |