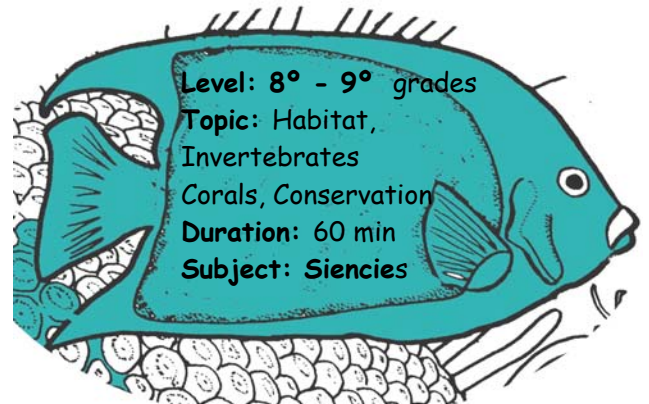


Making a Coral Reef is Not Easy

Objective:

Students will understand how much time and effort nature requires to construct and maintain a coral reef which is home to thousands of marine organisms.

Learning Skills: fine motor skills, spatial organization, and deduction



Information Base:

Every living creature has its home in some part of the world. The location or space used by an organism or group of organisms is their Habitat. A habitat includes everything that exists within that space, both living and nonliving. Every organism exists in a delicate balance between the living and nonliving. A coral reef is a special habitat whereby thousands of creatures find everything they need to survive. Their conservation requires that all citizens become aware that directly or indirectly, we depend on them.

Vocabulary: Habitat, coral reef

Materials: paper, paper clips, video "The Coral Jungle", picture of a reef to color.

Procedure:

1. Welcome and introduce the docents. Ask them how a house is made, from the foundation to the roof. Discuss the time required to make a building.
2. Explain that throughout their visit they will be able to build one or two houses.
3. Take them to the video room and show them the movie "The Coral Jungle". Make references to coral islands or other examples like the Great Barrier Reef of Australia (almost the size of Panama) so they can have an idea of the magnitude of these structures. Comment.
4. Take them to the aquariums and show them the small scale coral reefs. Show them the other organisms living in cracks, the bottom, and swimming among the reef. The reef is a home for many animals. "How long do you think it takes to build a reef?"

5. They will now build a house. Separate into groups of 2-3 students. Give each group paper and clips (only 3 papers and 10 clips per group). They must build a tower as high as they can. The only rule is that they cannot introduce any other materials. Specify a time limit (10 minutes). Explain that every minute represents 1000 years for a reef.
6. This will take them some time (there can be a prize for the first group to finish or the highest tower built).
7. When the majority are done begin discussing the difficulties they had and why some are still not done.
8. One person from each group can explain to the rest their idea and how they built their tower.
9. Let them know that what they built is like a reef. They can see how difficult it was to build, maintain a balance between pieces, and to make it high and strong so it cannot fall down.
10. The next step requires the entire group's attention. Create a wave that destroys some of the towers (like a tropical storm). "What do you think happens to the animals?"
11. Now pretend that another part of the reef is destroyed by a hotel's runoff (destroy another tower). Now another because they extracted coral to sell for ornaments (partially destroy another). Keep going until only one or two remain.
12. "What happens now to the animals from the coral reef?"
13. Conclude by asking them to provide examples of habitat destruction on land or sea. Ask them what they believe happened to the species that lived there.

Suggestions for the Docent:

If there is time, give each student a reef handout and crayons to color and add animals that live in a coral reef. If there is no time left, let the children take the handouts home to color in the classroom.

Suggested Classroom Activities:

Students may discuss a terrestrial habitat, like a forest.

Evaluation:

Discussion at the end of the activity is the evaluation.