

LESSON PLAN: NATIVE VERSUS NON-NATIVE PLANTS- MAKING A BROCHURE

Adapted from <http://www.bcps.org/offices/lis/models/nativeandnon-native/> by Mary Garvilles

Lesson overview: Students will research information on the native vs. non-native plants in the Mariana Islands and decide how non-native plants affect the environment. They will make a brochure that explains the effects of a particular non-native plant on to the environment. They will present the results of their research to the class, and as a class, reach a consensus about what plants should be planted in our school's garden.

Objectives: Students will be able to:

- 1) Compare and contrast native vs. non-native plants of the Marianas
- 2) List at least 10 native plants of the Marianas
- 3) List at least 10 non-native plants of the Marianas
- 4) Research information about the native vs. non-native plants of the Marianas
- 5) Use a variety of sources to gather information
- 6) Prepare a high-quality brochure to be distributed widely

Time/duration: 2 hours

Materials:

- 8 x 11 papers for foldable and brochure
- plant books for the Mariana Islands
- computer access with internet and printer
- journal
- pen/pencil

Background: *Non-native* or *exotic* refers to species that do not naturally occur in an ecosystem. *Invasive* species are plants or animals that aggressively establish themselves in an ecosystem at the expense of its native species and natural functions. Most exotic species introduced to the Marianas do not become invasive. Many of the species we rely upon such as rice, bananas and mangos are exotic but not invasive.

Lesson procedure:

1. Divide the class into groups of 4. The group will be responsible for investigating native and non-native plants of the Mariana Islands. Have them keep in mind that they must decide what species of plants they will be planting in the class garden.
2. Provide students with local plant books and websites to get information they need. See "Teacher Resources" at the end of this booklet. You may ask students to get ideas from their parents or other relatives who enjoy gardening. Challenge them to figure out whether plants they see around their house are native or non-native.
3. Discuss the difference between native and non-native, and between non-native, alien and invasive.
4. Students will create a foldable with a piece of paper. (see http://www.scsk12.org/SCS/curriculum_guides/6-12_Math_Webpage/ms%20pages/foldableexamples.htm for pictures of foldables). On one side of the foldable have students write information gathered on native plants, and

on the other side information gathered on non-native plants. This information should include:

- a. A list at least 10 native and 10 non-native plants with descriptions of each plant.
5. In their journals: Have students answer these questions: what information do you need to decide how non-native plants affect the environment? Are the effects more harmful or beneficial? While students are doing this, review their foldables/graphic organizers. When they are finished writing, have them discuss their answers with the class.
 6. Have students design a landscaping plan for their garden and present this in a brochure. This brochure should include
 - a. information they have gathered in their foldable and in their journals about native and non-native plants.
 - b. a justification for selecting certain plants in their garden
 7. Each group should present the results of their research to the class. As a class, select the brochure that would best fit our school garden. Copies will be made of this brochure and will be provide to anyone who wants more information on the class's school garden.

Evaluate: Use the attached rubric to evaluate each brochure. See also:

<http://www.bcps.org/offices/lis/models/nativeandnon-native/images/rubic.htm>