

Site Preparation I
Island School
4th Grade Hawaiian Studies Class

Goal: Students layout a replicated planting site for Ohia and Ti plants they have propagated.

Standards Addressed:

Domain I

Habits of mind: Using unifying concepts and themes of change, scale and model

Doing Safety

Relating the nature of technology and science

Domain II

Interdependence of science, technology and society

Malama I Ka' Aina

Skills Practiced and Developed:

Experimental design layout, restoration planning, measurement, teamwork, critical thinking

Underlying Concepts Realized:

Plant growth and development, spatial competition, resource competition, experimental design, replication

Materials Needed:

- 50 irrigation flags
- 10 pieces of yarn cut to 2 meters
- 5 pieces of yarn cut to 1 meter
- 5 pieces of yarn cut to 0.5 meters
- 5 permanent markers
- 5 plastic bags (each bag contains: 10 flags; 1 marker; two 2-meter, one 1-meter and one 0.5-meter piece of yarn; and one marker)

Activities:

Science partner describes and demonstrates activities to students

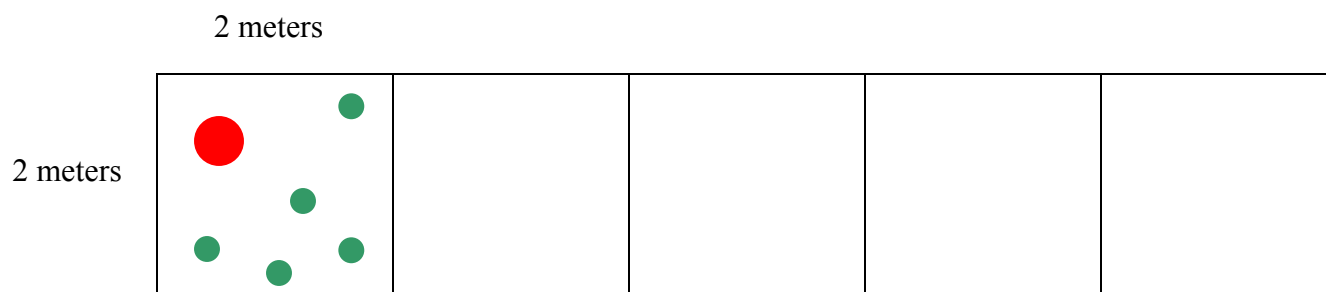
Students break into 5 groups of 4 students each and proceed to garden area

At the garden area each group will receive materials for their activity

After receiving their packets groups begin project

- One group member is responsible for measuring 2x2 meter area (each group will have the same sized area.)
- One group member is responsible for deciding location of plants within groups' area
- One group member is responsible for placing flags at corners of the groups' area and where each plant will be located
- One group member is responsible for ensuring that Ti plants are at least 0.5 meters apart and Ohia is 1 meter apart from any other plant

Layout Of Replicated Design And Sample Planting Locations



General Information Required on Flags

Group Name
Date
Corner #

For flags to be placed
on corners of 2x2 area

Ohia
Or
Ti # 1-5

For flags to identify
location of plants
within area