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 1-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

2 meters

2 meters

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