# Kanui Kapono's Conservation Horticulture Project

# Kindergarten Concept and Skills Inventory

#### **OBJECTIVES**

#### The students

- Assess their own knowledge of concepts and skills
- Receive comment on their assessment from the teacher and science partner

#### BACKGROUND

This activity involves the student in self-assessment, a new experience for most kindergartners. Self-assessment helps students become aware of their own knowledge and skills. Even young students have a reasonably clear understanding of what they do and do not know and what they can and cannot do.

#### ADMINISTERING THE ASSESSMENT

The pre-project inventory takes about 30 minutes to administer. We will follow up with a post project inventory after completing all the units in this project. The pre and post inventories can be given in two sessions. The teacher will need to read the listed concepts and skills to the students. Dividing the class into sections may make administration easier. The assessment is not a guessing game, so help the students as needed.

#### **RESPONSES**

The answers (Yes/No) can be circled, marked with Xs, underlined or whatever.

#### THE TEACHER - SCIENTIST ASSESSMENT

Teacher-scientist partners use the inventory to determine the student's development in Hawaii's Conservation Horticulture Project. Based on student responses, the partners determine if students have some knowledge of concepts and skills presented. Where there is a difference between student response and teacher-scientist assessment, for example, a yes where it is felt there should be a no, students can be checked to see if their perception is accurate by having them teach the concept or demonstrate the skill to the partners. The assessment can be adjusted by recording any change in the space below the appropriate concept or skill.

#### **PROCEDURES**

- 1. Help students complete the Concept and Skills Inventory
- 2. Check the students' self-assessment for any apparent discrepancies
- 3. Check discrepancies between the students' assessment and yours by having them tell you about (teach) any questioned concept responses or show you (demonstrate) any questioned skill response
- 4. Bring the completed inventory to your next session at Waipa
- 5. Share inventories with the students' parents

# SUGGESTED SCRIPT FOR ADMINISTRATION OF KINDERGARTEN CONCEPT AND SKILLS INVENTORY

## Concepts

1. Do you know what living means? ... NO, I do not know what living means; YES, I know what living means.

Please circle yes or no to answer these questions

1	Do you know what <b>living</b> means?
2	Do you know what <b>diversity</b> or different means?
3	Do you know what conservation or not wasting things means?
4	Do you know what a <b>flower</b> is?
5	Do you know what a <b>leaf</b> is?
6	Do you know what a <b>root</b> is?
7	Do you know what a seed is?
8	Do you know what <b>sunlight</b> is?
9	Do you know what <b>energy</b> means?
10	Do you know what <b>grow</b> means?
11	Do you know some things plants need to live?
12	Do you know what <b>soil</b> Is?
13	Do you know what a <b>greenhouse</b> is?
14	Do you know what <b>environment</b> means?
15	Do you know what <b>guessing</b> is?
16	Do you know what <b>not-living</b> means?
17	Do you know what a weed is?
18	Do you know what extinct or not living anymore means?
19	Do you know what <b>small</b> means?
20	Do you know what <b>population</b> means?
21	Do you know what rare or not much of something means?
22	Do you know what a threat or danger to something is?

23	Do you know what <b>native</b> means?
24	Do you know what <b>endemic</b> or not living anywhere else means?
	Do you know what science is?
26	Do you know what <b>germinate</b> means?
27	Do you know what <b>more</b> means?
28	Do you know what less means?

## Skills

Do you know how to observe? ... NO, I do not know how to observe, YES, I do know how to observe.

## Please circle No or Yes to answer these questions

1	Do you know how to <b>observe</b> or watch something?
2	Do you know how to <b>describe</b> or tell people about something?
3	Do you know how to cooperate or work with others?
4	Do you know how to <b>count</b> things?
5	Do you know how to compare things?
6	Do you know how to use a <b>ruler</b> or measure things?
7	Do you know how to use scissors or cut something?
8	Do you know how to <b>dig</b> a hole or use a shovel?
9	Do you know how to water plants?
10	Do you know how to <b>sow</b> or plant seeds?
11	Do you know how to <b>cultivate</b> or grow a plant?
12	Do you know how to <b>plant</b> a tree, shrub or flower?
13	Do you know how to <b>uproot</b> or pull a weed from the ground?
14	Do you know how to <b>mix</b> soil?

Name		
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Date\_\_\_\_

# Concepts

1. living	Yes	No
2. diversity	Yes	No
3. conservation	Yes	No
4. flower	Yes	No
5. leaf	Yes	No
6. root	Yes	No
7. seed	Yes	No
8. sunlight	Yes	No
9. energy	Yes	No
10. grow	Yes	No
11. plants needs	Yes	No
12. soil	Yes	No
13. greenhouse	Yes	No
14. environment	Yes	No
15. guessing	Yes	No
16. not-living	Yes	No
17. weed	Yes	No
18. extinct	Yes	No
19. small	Yes	No
20. population	Yes	No

21. rare Yes No 22. threat Yes No 23. native No Yes 24. endemic Yes No 25. science Yes No 26. germinate Yes No Yes No 27. more 28. less Yes No

Kanu,

Rapono

# Skills

1. observe	Yes	No
2. describe	Yes	No
3. cooperate	Yes	No
4. count	Yes	No
5. compare	Yes	No
6. ruler	Yes	No
7. scissors	Yes	No
8. dig	Yes	No
9. water	Yes	No
10. sow	Yes	No
11. cultivate	Yes	No
12. plant a tree, shrub or flower	Yes	No
13. uproot	Yes	No
14. mix soil	Yes	No

Activity adapted from DASH Kindergarten Concept and Skill Inventory (by Francis M. Pottenger and Donald B. Young, Curriculum Research and Development Group, University of Hawaii) and created by the GK-12 Program; Ecology, Evolution and Conservation Biology Program, University of Hawaii.

On the web at: http://www.hawaii.edu/gk-12/evolution