Information For Leaders

What You Will Need for Each Activity

Listed below are the materials and preparations you will need for each activity. Most of the materials can be purchased locally. The more difficult-to-find items, such as pipets and disposable gloves, can be purchased from Wonderwise. The symbol ∫ indicates that an item can be ordered from the Wonderwise Web site or Destination Education, Inc., the Wonderwise distributor. To purchase supplies, kits, videos, or CD-ROMs contact:

Steve Lenzen, Destination Education, Inc., 1638 Harwood Street (68502)
PO Box 6124, Lincoln, NE 68506
Toll Free 877-347-4047, Fax 402-435-0119, Email: slenzen@shopdei.com

Activity 1
Everyday Poisons

For the entire group:
∫ 17-min. video
Fatinah Jackson, African Plant Explorer

For each team of 4:
• 1 squeeze bottle with cassava gel (see instructions below)
• 4 pieces of white paper cut into 20 cm squares
• 4 pieces of white cloth cut into 20 cm squares (old cotton sheets work well)
• 4 pencils
• masking tape
• 4 cotton swabs
• hair dryer (optional)

To make cassava gel:
∫ 1½ cups tapioca flour (also called cassava starch)
• 3 teaspoons alum (powdered ammonium alum)
• pan of 9 cups water
• spoon
Directions (yields 9 cups)
1. Combine ingredients in saucepan.
2. Heat on medium, stirring constantly for about 20 mins.
3. When starch thickens to an opaque gel, remove from heat.
4. Immediately spoon gel into squeeze bottles.

Make 8 copies of the Poison Plant Recipe Card on p. 6 for each group.

Activity 2
Investigating Starch

Activities 3 and 4
African Arts

For each team of 4:
Activity 2: Investigating Starch

Day One
∫ 1 plastic pipet or dropper
∫ 1 teaspoon tapioca flour
• 2 tablespoons iodine (povidone-iodine 10% solutions works well and is found in drugstores)
• 4 soda crackers
• 8 small plastic or wax-coated paper cups
• 1 cup water
• 4 plastic spoons
• 1 plastic plate
• 4 or 5 small pieces of each: cheese, bread, corn chips, crackers, apples, potatoes, or celery for the prepared food plate (see instructions below)

To prepare the Food Plate:
Cut up small pieces of at least 2 starchy foods (bread, cracker, potato, corn chip) and 2 non-starchy foods (cheese, celery, apple). Place on the plastic plate along with a teaspoon of tapioca flour.

Activity 5
Green Travelers

For each team of 4:
∫ 1 plastic pipet or dropper
∫ 1 teaspoon tapioca flour
• 2 tablespoons iodine (povidone-iodine 10% solutions works well and is found in drugstores)
• 4 soda crackers
• 8 small plastic or wax-coated paper cups
• 1 cup water
• 4 plastic spoons
• 1 plastic plate
• 4 or 5 small pieces of each: cheese, bread, corn chips, crackers, apples, potatoes, or celery for the prepared food plate (see instructions below)

To prepare the Food Plate:
Cut up small pieces of at least 2 starchy foods (bread, cracker, potato, corn chip) and 2 non-starchy foods (cheese, celery, apple). Place on the plastic plate along with a teaspoon of tapioca flour.

For each team of 4:
Activity 5: Green Travelers

Day Two
∫ 1 pair disposable gloves
• 4 sponge paint brushes (about 2–3 cm wide)
• newspapers (enough to cover tables with a thick layer)
• 4 plastic spoons
• 1 plastic dish tub half-filled with warm water (fill immediately before use)
• 2 boxes dark blue dye (see instructions below)
• 7 plastic wide-mouth 16 oz. containers

To prepare the dye:
(yields 4 cups)
1. Dissolve 2 boxes dye thoroughly in 4 cups hot water
2. Pour ⅓ cup dye into each plastic container
3. For best results, dye cloth while solution is still warm.

For each team of 2:
∫ 1 large world map placed on a wall for the entire group
• thin-line colored markers
• ruler
• pencil

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