

E.T. - A LOCAL WAY OF LEARNING

**Title:** SAILBOAT RACES

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**Grade Level:** 3-6

**Concepts:**  
1. Energy  
8. Values and Attitudes

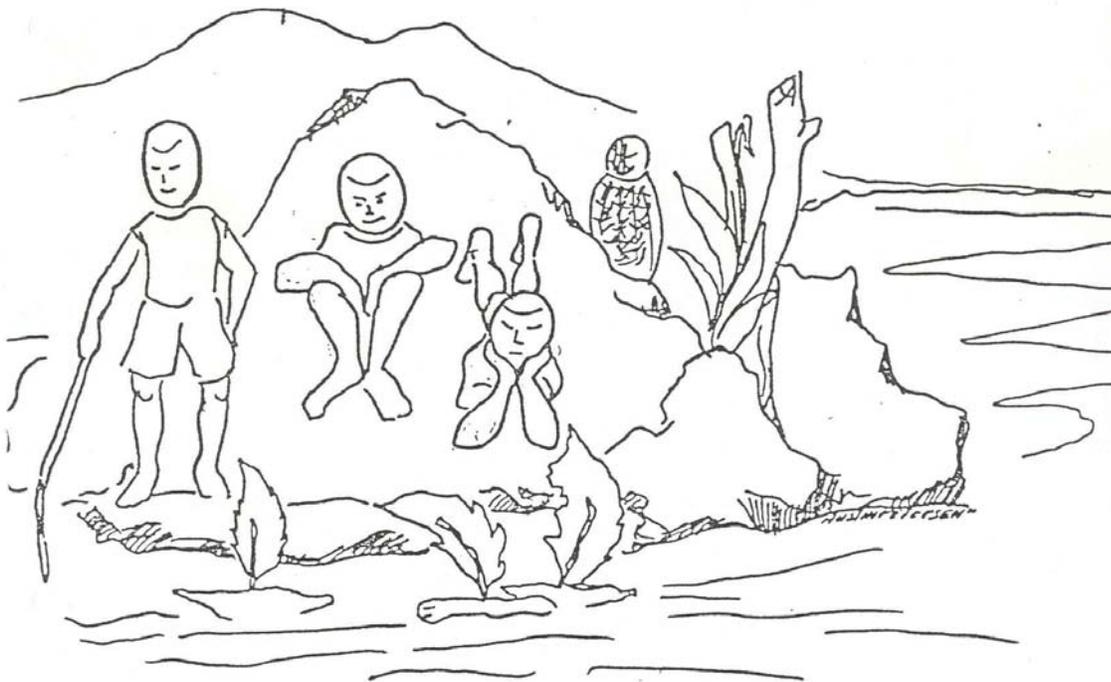
**Disciplines:**  
1. Science  
2. Language Arts

**Objective:**

The students will observe some basic principles of aerodynamics, and they will become acquainted with wind as an energy source.

**Rationale:**

Our island is completely surrounded by water and the children constantly see sailboats. Through this activity they will learn more about how a sailboat works. This activity can be done using a large tub of water outside the classroom. If desired, the students can be taught some basic safety rules in the use of a knife.



E.T.

## SAILBOAT RACES

### **Materials Needed:**

Pieces of bark or wood, twigs and leaves, and a knife with a leather punch or other sharp carving tool or use this suggestion:

The split-open woody seed pod of the African Tulip tree flower makes an excellent boat. Caulking, glue or chewing gum would be a better means of securing the mast to the boat. Attach the sail before stepping the mast.

### **Directions/Activity:**

1. Select a piece of bark or wood.
2. Bark or wood may be carved to produce the desired shape and size or may be used as is.
3. Using a leather punch or other sharp tool, carve a small mast hole into the hull (piece of wood). Let the students select location of hole.
4. Insert a twig into the hole for a mast.
5. Weave a leaf onto the twig for a sail.
6. Have a sailboat race!
7. -Keep track of the race and try to discover the characteristics of the most efficient sailboats. Discuss the characteristics of the slower boats. Some factors might be shape, area of sail compared to hull size. Discuss:
  - a. Wind as an energy source for sailboats.
  - b. What are some other uses of wind as an energy source?