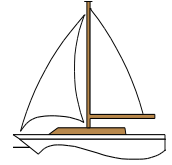


## HOW TO CATCH THE WIND AND START SAILING



Here are some suggestions on how to get started on the sailboat unit.

### One to two weeks before you begin:

1. Gather the following supplies for this activity.
  - box fan
  - construction paper (cut paper 5" x 7")
  - fine sandpaper (It is used to shape the hull – porous Styrofoam.)
  - index cards (3" x 5" or 4" x 6")
  - newspaper (Students will need it when they shape their hull.)
  - popsicle sticks
  - stopwatch
  - straws
  - Styrofoam – 1" thick (You can purchase sheets 1" x 12" x 36". Cut into 3" x 5" pieces.)
  - transparent tape
  - wooden coffee stirrers (Check with a local restaurant supply company for these.)

The above materials are recommended for use during this engineering challenge. Please feel free to add to or delete from this list.

2. Each team will need a container to store supplies and money. You may want to send a note to parents asking them to send in large plastic containers or shoe boxes.
3. The students will be using "money" during this unit. It takes about a week to duplicate, laminate, and cut out all the coins and dollar bills. (Please look in the *Store* section.) You will want to buy or make containers to hold change in the store.
4. There are price tags in the store section you may want to cut apart, mount on construction paper, and laminate.
5. Prepare a store window.
6. There are word cards provided in the unit. It is suggested they be mounted on construction paper and laminated.
7. Have parent volunteers help you prepare the center ideas.
8. Purchase sailor hats for the students to wear during their building times.
9. Run off the Engineering Portfolio for each student. Place in a folder with

prongs. (See *Engineering Portfolio* section.)

**One to two days before you begin the unit:**

1. Set up your classroom store.
2. Decide which children will be working together. (It is suggested students work in teams of two.)
3. Organize materials for the bulletin boards.
4. Prepare the sailboat flannelboard pieces (this section) and the pieces for the island activity (*Social Studies* section).
5. Prepare some air and wind experiments for the children to do.

**To begin the unit:**

1. Introduce air and the wind to the students by reading books and doing experiments. (See the *Bibliography* for suggested books.)
  - The science section contains activities.
2. Do the island activities in the social studies section with the students after the air and wind activities.
3. Familiarize the students with the parts of a sailboat.
  - Use the flannelboard pieces and the word cards.
  - Define each part with the students.
  - Show pictures of sailboats to students.
4. Read books about sailboats to the children or have them read books independently. (See the *Bibliography*.)
5. Introduce the terms on the word cards. Send the vocabulary list home with students.
6. Before the students actually start building, the engineering portfolio needs to be reviewed with them. They need to do the Engineering Team Information and Engineering Worksheet One first. (See *Engineering Portfolio* section.)
7. You may want to have the students read some of the selections in the *Resource Booklet* section and complete some of the worksheets that are related to the readings.

This unit is designed to last approximately two to three weeks. The ideal amount of building time is 30 to 45 minutes each day. Take time to pick and choose the activities you feel will work best for your students and...

# HAVE FUN!

