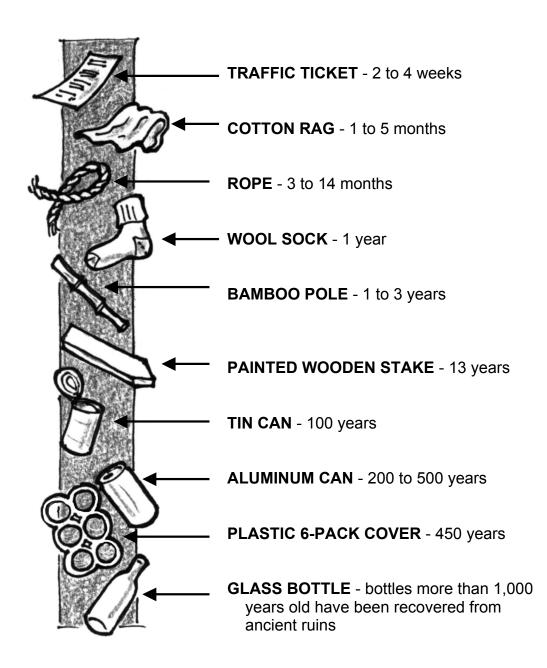
## **Enduring Litter**

Litter on the beach is ugly. How long it will stay before decaying may be an ugly surprise.



Graphic adapted from *A-Way With Waste; Second Edition;* Washington State Department of Ecology with information from The Book of Lists 2.

## Where Is "Away?"

Created by Holly Anne Foley, Marine Science Center, Poulsbo, Washington

- **Rationale:** The garbage or trash that is found on our beaches will decompose naturally in time and many people will dump their materials with this rationale. But the amount of time this takes and the volume of trash is turning many beaches into an eyesore and creating an environmental hazard.
- **Learning Outcome:** Students will recognize the quantity of trash that accumulates on the shoreline, and the time it takes that trash to decompose.
- **Materials:** Scale (fishing type that weighs hanging items), collecting bags (Plastic? not a good example, better to use reusable cloth or burlap, or paper), marking stakes, "Enduring Litter" chart (note on chart the plastic 6-pack cover is NOT the 6-pack plastic retaining rings, the one pictured is rigid plastic).

## **Activities:**

- 1. Divide the group into teams to collect different materials, one for plastics, one for paper, one for wood, etc. Give each group a collecting bag.
- 2. Choose a stretch of beach or stream bank on which to collect. You may want to use a measured distance so that students can compute the amount of trash per mile.
- 3. Have each team walk along the beach and collect the material they were assigned to find.
- 4. Back in the classroom, have the students weigh the different types of trash and compute the approximate amount in one mile of beach. Have the students estimate how long each material will take to decompose over time. You may need to discuss what decomposition is and how the process takes place.
- 5. Time Capsule If you have a place in the school yard, or in a generous local parent's or teacher's yard, bury each material in a marked spot for retrieval at a given time (perhaps do this at the beginning of the school year, and dig up near the end of the year). The decomposition times can then be compared to the students' predictions. For the remaining materials that have not decomposed, have students construct a time line showing total decomposition of the materials.