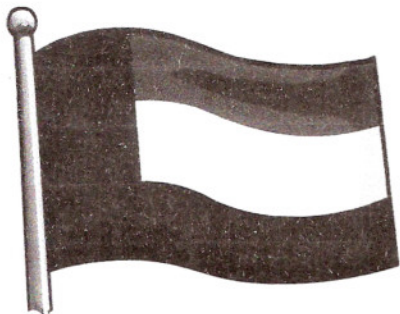


United Arab Emirates



The United Arab Emirates is an unusual country. It is a federation or union of what was once seven separate states. Each state was ruled by a *sheik*, or emir. When the U.A.E. was formed in 1971, the seven sheiks became the Supreme Council of the Union, the most important part of the country's government.

The most important of the seven emirates are Abu Dhabi and Dubai. Abu Dhabi has 90 percent of the country's oil reserves. Oil helped transform the U.A.E. into one of the most modern countries in the world. Many of its people enjoy luxury cars, cell phones, nice homes, super highways, skyscrapers, and modern hospitals.

The United Arab Emirates is located on the Arabian Peninsula. It is bordered on the northwest by Qatar, on the east by Oman, and on the south by Saudi Arabia. Its north and northeast coasts lie along the Persian Gulf. It is a relatively flat land with sparse rainfall. Irrigation has made the growing of vegetables and dates possible, but Emiratis still must recycle some water for other purposes. A water desalting plant has helped, and research is taking place to develop *halophytes*, or salt-tolerant plants. The entire Middle East, and much of the world, would benefit greatly if some plants and fields could be irrigated with water that is brackish (slightly salty).



Project #1

Conduct a science experiment using varying amounts of salty water on plants. (This project will take several weeks to complete.)

Materials

- large plastic cups
- potting soil
- vegetable seeds
- measuring cup
- salt

Directions

1. Decide on what vegetable you want to grow.
2. Poke holes in the bottom of 6 or 7 plastic cups to allow for drainage.
3. Fill each plastic cup with potting soil.
4. Plant the seed of one vegetable in each of the cups.
5. When your plants come up, water them with different amounts of salty water. Add $\frac{1}{4}$ teaspoon (1.2 ml) of salt to a measuring cup of water and

water your first plant. Apply this same amount of salty water to the plant each day.

6. For your second plant, add $\frac{1}{2}$ teaspoon (2.5 ml) of salt to a measuring cup of water. Apply this same amount each day.
7. For plants 4–6, increase the amount of salt in the cup of water by $\frac{1}{4}$ teaspoon (1.2 ml) respectively.
8. Keep a record of your findings. Record how long each plant survives.
9. Write a conclusion to your findings.

