



Tidepool Critters

Introduction

In the book *In One Tidepool* by Anthony Fredericks, a young girl discovers the amazing creatures in a tidepool. Students who have read the book may wish to observe their own "tidepool critters" in action. Here's an activity that will help them do just that!

Materials Needed

- ◆ Brine Shrimp Eggs
- ◆ Non-iodized kosher salt
- ◆ Two-quart pot
- ◆ Water
- ◆ Teaspoon
- ◆ Medicine Dropper
- ◆ Hand lens or Microscope

Procedure

1. Fill the pot with two quarts of water and allow it to sit for two days, stirring it occasionally. (Most city water has chlorine in it which would kill the shrimp. "Aging" for several days allows the chlorine gas to escape from the water.)
2. Mix 5 teaspoons of non-iodized salt with the water until dissolved.
3. Add 1/2 teaspoon of brine shrimp eggs to the salt water and place the pot in a warm spot.
4. Invite students to use the medicine dropper to remove some eggs to observe them with a hand lens or microscope. They may wish to check a drop of water every day. They also may wish to create a series of drawings or illustrations which record the growth of the brine shrimp.
5. The brine shrimp eggs will begin to hatch in about two days. They will continue to grow in the water until they reach their adult stage. Students will be able to watch this growth process over a period of many days.

Nature Connections

- ◆ Invite students to discuss the similarities between human dwellings and animal homes. What are some of the things that determine where an animal lives? Are those conditions or features similar to the considerations of humans in selecting a living site? Do animals have more options for living spaces than humans?
- ◆ Encourage students to write a fictitious letter to the girl in the story. What would they like to say to her? What would they like to know about her adventures with the tidepool in the book? What would they tell her about the brine shrimp?

Key Concepts

- ◆ Environments are the space, conditions, and factors that affect an individual's and a population's ability to survive and their quality of life.
- ◆ Changes in environments can be natural or influenced by humans.
- ◆ Some environmental changes occur slowly, and others occur rapidly.

For standards correlation please see our website.

Additional Resources

Brine shrimp are found in salty waters across the globe. One surprising locale is the Great Salt Lake in Utah, where brine shrimp represent a multi-million dollar industry. To find out more about these amazing creatures visit the following websites:

- ◆ <http://wildlife.utah.gov/gsl/brineshrimp/index.php>
- ◆ <http://ut.water.usgs.gov/greatsaltlake/shrimp/>

