

Illustrating a Frog's Life Cycle

Materials

For each student:

- white construction paper
- scissors
- crayons or markers
- glue
- pencil
- blue tissue paper (to represent the pond)
- Frog lifecycle cutouts
- circular pieces of small bubble wrap (to represent eggs)

Suggested grade levels
K-4th

Louisiana GLEs

K- SI 1, 2, 3, 4; LS 25, 28
1st- SI 1, 2, 3, 4, 5; LS 27, 31, 32
2nd- SI 1, 2, 3, 4, 6; LS 27, 30, 33, 35
3rd- SI 1, 2, 3, 4, 6; LS 35, 38
4th- SI 1, 2, 3, 4, 7; LS 41, 47, 48, 50, 51, 52, 53

References

From Tadpole to Frog by David Stewart
<http://www.frogweb.gov/-a>
look at North American declining frog populations.

Students will combine art with science to familiarize themselves with the lifecycle of a frog.

Background

The word “amphibian” means “two lives”. This means that they live part of their life in water and the other part of it on land. Frogs are amphibians that start off life as an egg in water or in a fluid-filled sac. A female frog may lay several thousands of eggs at once. This floating clump of eggs is called frog spawn. Each frog egg begins as a single cell that eventually splits into two. These two then split into four cells, and on and on. Eventually this mass of cells forms a frog embryo that lives off its yolk. After about 21 days, the embryo hatches becoming a tadpole. The tadpoles remain underwater for several weeks breathing through gills. The tadpoles begin to change significantly after about 5 weeks, growing hind legs, which are eventually followed by forelegs. As they grow, they also develop lungs. Over time, the tadpole becomes more froglike with a shorter tail and more functioning lungs. This allows them to move on land and breathe air. Not all frogs will make it to the adult stage. They have many threats like ducks, fish, insects, and other animals that will eat the eggs or tadpoles. The frog life cycle generally takes from 10 to 12 weeks depending on the species.

Procedure

Before class preparation: Cut small bubble wrap into small pieces (~2 inch diameter circle). Using a black permanent marker place a dot on each bubble to represent the frog embryo in the eggs (bubble wrap).

1. Pass out the white construction paper and blue tissue paper.
2. Explain to the students that they are going to construct a pond to show their frog life cycle. Have them cut out a circular piece of tissue paper to glue onto their white sheet of paper. This represents the water.
3. Pass out the bubble wrap explaining that this represents the first stage of the life cycle, the egg mass.
4. Next, pass out the Frog lifecycle sheet. Ask students to color the frogs on the sheet.
5. Have students cut out each stage of the life cycle.
6. Cut out the frog stages and arrange them in order from youngest to oldest.
7. The students will then glue (in order) the 5 stages of the frog life cycle. They may decide to connect each stage with an arrow.
8. Finally, they will label and describe each life stage.

Frog Life Cycle Cutouts

