Life Cycle of a Frog

Teacher's Notes

Supplies (for a class of 30 students):

1. From Tadpole to Frog Book (by David Stewart; ISBN 0-531-15335-5)
2. Frog development demonstration set (plastic animals)
3. Acrylic tadpole and frog specimen
4. 2 sets Frog specimen description cards
5. 10 Microslide viewers
6. 10 Tadpole to Frog microslide strips
7. 15 Laminated Microslide description sheets
8. 3 Sets of Frog stamps
9. 5 Ink pads
10. 10 pairs of scissors
11. 2 staplers
12. 5 Sets of jumbo colored pencils and/or 15 sets of regular colored pencils
13. 30 pencils (Juniors)
14. 30 Frog Embryo Development Study Guides (Juniors)
15. 30 Microslide forms (Juniors)
16. 30 Frog book forms (Daisies or Brownies)
17. Life Cycle of a Frog teachers notebook (red)
18. 1 set of Frog Life Cycle sequence cards

Introduction:
This lab has 4 different parts. You can elect to divide the girls into groups and have them rotate or do each activity with the full group. I suggest that the book is read to everyone at the beginning so that everyone has the necessary background to complete all of the activities. Activities 2 and 3 are best done with half of the group. Split the group in two and rotate. For the younger girls, activities 2 and 3 are just observations so 5 minutes at each is fine. For the older girls, you will want to allow them 10 - 15 minutes are each to complete the associated worksheet. Activity 4 is optional for Juniors.

**Activity 1: Book and Group Discussion**

Start the lab with reading the frog development book titled *From Tadpole to Frog*. For the younger girls or those with language difficulties, use the manipulatives included to explain the stages of frog development. For Daisies and Brownies, this book should have enough detail. For Juniors I suggest using the Life Sequences cards after reading the book. The cards can also be used in conjunction with the BioQuest Frog Development Study Kit. (See activity #2).

**Activity 2: Examining the BioQuest Frog Specimens**

Pass around the specimen. In the instructors notebook (check the pouch) are two sets of 8 laminated cards that describe what is in each well. Discuss this with the younger girls and check for similar developmental stages on the life cycle cards.
For the older girls, give each girl a *Frog Embryo Development Study Guide* and a pencil. Allow the girls to read the description cards and work in small groups to study all of the wells. The life cycle cards can be used in conjunction with the BioQuest Frog Development Study Kit.

**Part 3: Viewing Microslides**

Each girl should take some time to look at all of the stages of development. A laminated microslide description sheet is available for each viewer. It explains in detail what is in each image. This sheet will be especially useful for the Juniors. Take some time to talk about each stage and discuss what they are seeing. For the older girls pass out the microslide worksheet. The girls should draw (using colored pencils) what they see in each view on the microslide. This is very similar to the lab notebooks biologists keep when studying microscopic specimens.

**Part 4: Documenting**

In the final exercise each girl should make a frog development book. Pass out the 2 pages of the book worksheets and scatter the stamps around the room. Each girl should put the appropriate stamp on each page. She can then color in the pictures using the colored pencils. When finished, cut around the boxes and staple to make a book. If time remains, read the book as a group.