

# Creek Critters

## *Following Your Visit (For Grades 4-6) - Activity 1*

### How's The Water?

#### Activity Procedure

1. Begin this activity with a review of all the animals seen during your visit to Sabino Creek. Have students refer to the "How's the Water" Survey Forms they filled out during their Creek Critters investigations. Generate a list on the board of all the Creek Critters seen. Next, ask the students what they thought about the quality of Sabino Creek overall -- did it appear to be a clean, unpolluted creek? Were there any signs of trash or chemical pollutants? Were there a lot of different kinds of animals?
2. Explain to the students that the variety of aquatic wildlife found in the creek can actually give us clues to the relative "health" of the water. The number and occurrence of certain aquatic insects can serve as a guide or indicator of the quality of the creek. Some kinds of insects simply cannot tolerate water that is polluted. When the students collected, observed, and recorded observing the creek critters during their visit to Sabino Canyon they were performing tasks similar to those of environmental biologists. By reviewing the data they collected, they will do just what biologists do to study stream quality. The data they collected can be used to help them determine the quality of the water in Sabino Canyon.
3. Have the students get into their study teams (established previously). Make sure each team has all the pages from their Creek Critters "How's the Water" Survey Kits. Explain to the students that each team should review their data sheets and compare their results with the Stream Quality Guide's measures for different classifications of stream quality. They should answer all the follow-up questions on their "How's the Water Survey Forms. Based on the critters they found in the field investigation, as well as the other data they collected, the students should classify the quality of Sabino Creek.
4. Allow each group to present, to the rest of the class, their conclusion on the quality of the Creek and how they reached that conclusion.

#### Objectives

##### Students will

- analyze data collected on field trip to Sabino Canyon.
- study water quality considerations and determine the general "health" of Sabino Creek.

#### Lesson Information

##### Materials

"Creek Critters Water Survey Forms" & "Creek Critters Checklist (already filled out by students), "Stream Quality Guide".

##### Time

One class period

##### Subject

Science

5. After each group has made a presentation, lead a class discussion on water pollution. Ask the students to name ways in which creeks, streams and rivers become polluted. Write the list on the board. Discuss the consequences of various pollutants introduced into Sabino Creek. What are possible contaminants in Sabino Creek? *(There are actually very few but people do throw trash)* Where could contaminants possibly come from which could affect Sabino Canyon? *(cars dripping oil, humans dumping trash or other pollutants, upstream dumping etc.)* How would they affect the plant life? Animal life? Human life?

## Extensions

Have students collect magazine and newspaper articles about aquatic and riparian issues. Keep a log of local issues. Make a bulletin board about water in our town.