



Curriculum developed by Tim Liggett of Conestoga High School at the Stroud Water Research Center, supported by a grant from the National Science Foundation's Research Experience for Teachers program. For non-commercial use only.

## **CORK LAB DISCUSSION QUESTIONS**

### **Questions for Transit Exercise**

Using your results, draw a map of the part of the stream you studied. Show any meanders the stream made and label the map with the different features that you found.

Using your "Percent Corks in Transit" graph, describe what is happening to the number of corks as the mass of them travels downstream. Does the number of corks get smaller at an even rate or does the number stay the same then drop off quickly?

Imagine that the corks were fallen leaves or the bodies of dead insects that are food for organisms living in the stream. Describe how much of this food is available to those organisms in the part of the stream where the leaves fall. Describe how much of this food might be available to organisms farther downstream. Be sure to include reasons for your answer.

Suppose this stream starts in a wooded area then flows in to a grass covered area with no trees. Compare the number of leaf-eating organisms in the wooded part of the stream with the number in the grassy part. Be sure to include reasons for your answer.

Suppose a farmer cuts down all the trees near the stream bank to have more space for crops. What might happen to the number of leaf-eating organisms in that stream? What might happen to the number of organisms further downstream? Be sure to include reasons for your answer.

### **Questions for Trapped Cork Exercise**

On the map you made before, show where the corks are trapped. Use a small figure to indicate how many corks were trapped at each location.

Using your graph, which type of stream feature held the highest percentage of corks? Which feature held the lowest percentage of corks?

Imagine a stream in a forested area where trees are close to the stream. Describe two different ways that fallen branches would increase the availability of food to organisms that live in the water?