

INTERACTIVE RESEARCH PLANNING FORM # 1

(for exploratory-level experiments)

Name _____ Date _____

1. What question have you chosen to investigate, and why?

Example: "Are worms and other soil invertebrates needed to break down leaves in the woods?" This question is important because it will help us to figure out whether microbes can break down leaves alone, or whether they need invertebrates to shred the leaves first.

2. Briefly describe a project you would like to do to address this question.

Example: We plan to make containers out of nylon stockings, which will keep most invertebrates out but allow water and air to pass through. We'll fill them with leaves and put them in the woods by the school.

3. What supplies will you need? How will you get any that are not already available in our classroom?

Example: We'll need the materials listed in Protocol 2, including a microscope, to check for tiny organisms that might fit through the stocking mesh. We'll also need a scale for observing and weighing the leaves. We'll bring nylon stockings from home and collect leaves from the woods.

INTERACTIVE RESEARCH PLANNING FORM #1 (continued)

4. How do you plan to schedule your project?

Example: We'll need one class period to set up the bags and put them in the woods. Then we'll need one period per month to empty a couple bags, weigh the contents, and collect and observe the organisms and whatever remains of the leaves.

5. Can you find reports by other students or professional scientists on this topic? If so, what can you learn from what has already been done?

6. Meet with another student or group to discuss these plans using the **Experimental Design Peer Review Form** (p. 124). Then describe any changes you've decided to make based on this discussion.