

Name _____

Date _____

Survivors at Foundry Cove!

Mud worms survived in highly toxic sediments at Foundry Cove. Was there something unique about the Foundry Cove population or are mud worms normally cadmium-resistant?

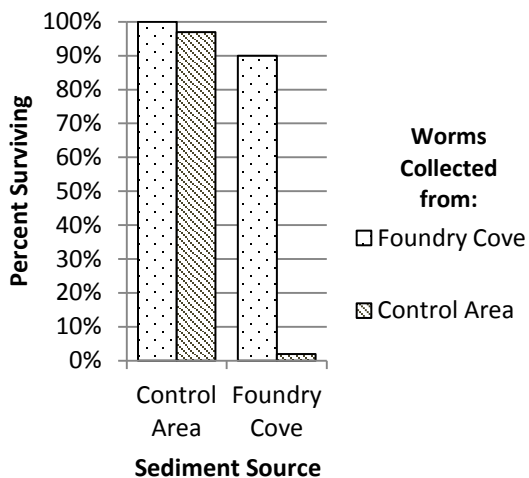
View the PowerPoint presentation “Survivors at Foundry Cove” and complete the items below.

1. Why were scientists surprised when they found large numbers of mud worms (*Limnodrilus hoffmeisteri*) living in Foundry Cove?

2. At first, scientists didn't know if *Limnodrilus hoffmeisteri* worms were usually cadmium-resistant. How could they find out? Explain an idea for an experiment that might answer this question.

3. Draw and label a sketch or diagram that illustrates this experimental design.

Graph A: Numbers of *Limnodrilus hoffmeisteri* worms surviving sediment exposure after 28 days



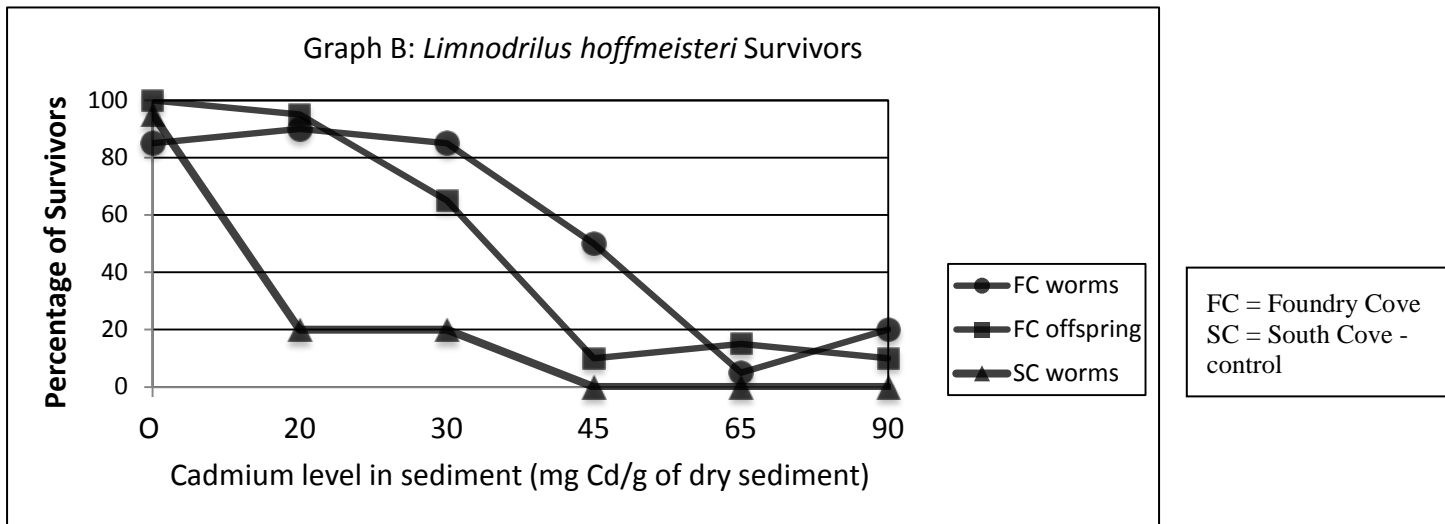
4. Explain the results shown in Graph A.

5. Describe the experiment you think the scientists conducted in order to get these results.

6. Do these results answer the question: Are *L. hoffmeisteri* usually resistant to cadmium? Explain your thinking.

7. The control area used by the researchers (South Cove) is about a mile from Foundry Cove. What would you expect to happen to worms from Tivoli Bays, about 45 miles from Foundry Cove? Explain your thinking.

8. Compare the results for each group of worms, based on Graph B. Note: South Cove is the control area.



9. a) Describe the experiment the scientists would have conducted in order to get these results.
