CLICKER QUESTIONS

*Responses are collected to assess what students are thinking but all participants receive full points, regardless of whether answer is correct. If less than 70% are incorrect, this can be a great place for the instructor to provide more explanation or encouragement.*

Pre-class Day 1

1. How would you know the fish that make up the staple food of the Grassy Narrows First Nations were poisoned by the mercury spill upstream?

*Feedback: There are different options. You may want to measure the mercury in tissues of fish caught in the area of Grassy Narrows or you could measure the mercury found in the water.*

2. What are some of the impacts of the mercury contamination on the Grassy Narrows First Nation?

*Feedback: Mercury poisoning symptoms often involve the nervous system.*

3. Considering the specific kind of community affected and its location, is this highlighted problem important to you? In other words, should you care about this problem given that you are in YOUR LOCATION – why or why not?

*Feedback: Although the news stories highlighted a Canadian community, mercury contamination in fished waters affects YOUR LOCATION.*

In-class Day 1

1. Which of these hypotheses indicates the fish are safe to eat? (A) null (B) alternative (C) don't know

*Answer: (A)*

2. Which of these hypotheses indicates the fish are not safe to eat? (A) null (B) alternative (C) don't know

*Answer: (B)*

3. Do you want the average mercury concentration of the fish population to be at the maximal limit, or do we want to be more conservative and have it lower? (A) maximal limit (B) lower (C) not sure

*Answer: (A) or (B)*

4. How might this be affected by consumption levels?

*Feedback: Consuming more fish could lead to more exposure.*

Pre-class Day 2

1. What if we took some Bass samples and found the average concentration of mercury was 3 mg/kg, which hypothesis would be supported, and would it be wise to eat the fish? (A) null; yes (B) null ; no

(C) alternative; yes (D) alternative; no (E) do not know

*Answer:* (D)

2. What if we took some Bass samples and found the average concentration of mercury was 0.1 mg/kg, which hypothesis would be supported, and would it be wise to eat the fish? (A) null; yes (B) null ; no

(C) alternative; yes (D) alternative; no (E) do not know

*Answer*: (A)

3. What if we took some Bass samples and found the average concentration of mercury was 0.57 mg/kg, which hypothesis would be supported, and would it be wise to eat the fish? (A) null; yes (B) null ; no

(C) alternative; yes (D) alternative; no (E) not sure

*Answer*: (E)

In-class Day 2

1. How comfortable would you be if you were to consume a Bass caught from Separation Lake in 2003? (A) I would feel comfortable eating the fish. (B) I would not feel comfortable eating the fish. (C) I do not know.

*Answer*: (A)