Opening Questions

Fill in the Blank for Questions 1-3:

1. Name two kinds of bias:

2. Name three sources of bias:

3. What are some important aspects of DDT?

Presentation Questions

Based on information in the presentation answer the questions and fill-in the blanks.

1. Name three health hazards of DDT:

2. Define Food Web

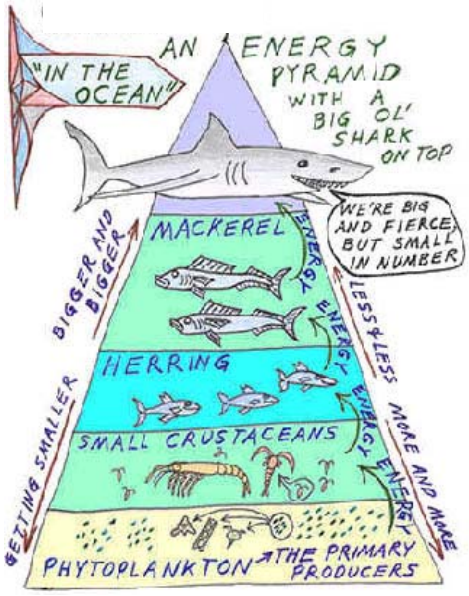
3. Put arrows to match the labels and the diagram:

   PRIMARY PRODUCER

   TERTIARY CONSUMER

   PRIMARY CONSUMER

   SECONDARY CONSUMER



4. Define bioaccumulation:

5. Define biomagnification:

6. Fill in the Osprey Food Chain and the DDE Concentrations:

Osprey Food Chain	DDE Concentration
_____	_____
_____	_____
_____	_____
_____	_____

7. What is a microgram?

8. What is a ug/g?

9. Define wet weight

10. Define dry weight

11. At what DDE concentration did bald eagles and osprey suffer from total reproductive failure?

Bald Eagles: _____ Osprey: _____

12. Fill in the blank:

    a) High concentrations of DDE in the egg-laying female osprey cause the female to lay eggs with_____ eggshells.

    b) What is the importance of thin eggshells?

13. If DDE causes eggshell thinning, how would you draw a graph showing the relationship between eggshell thinning and the concentration of DDE?

14. If DDE has no impact on eggshell thickness, what relationship would you expect to see between DDE concentrations and eggshell thickness?

15. If increased concentrations of DDE are associated with increased eggshell thickness, how would you make a graph showing the association between eggshell thickness and DDE concentration?

16. If bird embryos have too little selenium it decreases their rate of survival. If bird embryos have too much selenium, it bioaccumulates and is toxic to the birds. How would you make a graph showing the relationship between selenium and bird embryo survival?

17. DDE reduces reproductive rates at low concentrations. At moderate and high concentrations it causes total reproductive failure. How would you make a graph showing the relationship between DDE and reproductive success?