



Module 4 ~ Viva la Difference! (HS)

Guiding Questions – What Makes a Quality Lake? DVD Presentation

Name: _____ Class Period: _____ Date: _____

1. The rapid growth in Florida's population has affected many lakes. List three changes that have occurred in Florida lakes due to rapid population growth.

- 1.
- 2.
- 3.

2. Lakes have many different uses in Florida. List several examples of these uses.

3. List key concept ideas for the following words:

- A. Algae –
- B. Eutrophication –
- C. Nitrogen –
- D. Nutrient enrichment --
- E. Phosphorous –

4. There are four trophic state categories used to describe lakes. Define each of them briefly.

- A. Oligotrophic:
- B. Mesotrophic:
- C. Eutrotrophic:
- D. Hypertrophic:

5. Explain the effects of nitrogen and phosphorous on a lake's water quality:



Module 4 ~ Viva la Difference! (HS)

Guiding Questions – What Makes a Quality Lake? DVD Presentation

6. Describe how water flush rates affect the nutrient levels in a lake.

7. Several different factors can affect the sedimentation rates in a lake. Please discuss how the following two factors might influence sedimentation.

1. Increased nutrients:

2. Flushing rate:

8. Humans can have a direct impact on lakes. Examples include housing development, recreational boating activities, industry, agriculture and aquaculture. What are some of the changes that occur in lakes due to human impact?

9. Water clarity in a lake can be affected by various factors. Explain how the following two factors can change water clarity.

1. An increase in the abundance of algae –

2. Increased nutrient levels –

10. Fill in the blanks:

The presence of aquatic plants will generally not improve water quality unless at least ____% of the bottom is covered with submersed plants.

A eutrophic lake is not a _____ lake. Instead it is a _____ lake.

