

Name:

Date:

Class:

## Week 1 Questions **Answer Key**

1. Most algae is best described as:
  - a. Chemolithotrophic, eukaryotic microorganisms.
  - b. Chemolithotrophic, prokaryotic microorganisms.
  - c. Oxygenic, phototrophic, eukaryotic microorganisms.**
  - d. Oxygenic, phototrophic, prokaryotic microorganisms.
  - e. Plant life.
2. What distinguishes algae from plants? **Algae have no tissue differentiation.**
3. All algae contain, or have a very recent ancestor that contains chlorophyll a, a green pigment used by algae for photosynthesis.
4. Are all algae green? **no**
5. Describe the diversity of algae. **Algae vary by size and color, are one cell, and can be bacterial or large ocean kelps.**
6. Algae can live in any environment that is moist and has enough sunlight to grow.
7. Mixed phytoplankton are responsible for what percent of the total photosynthesis on Earth? **80%**
8. Which of the following statements about algae is TRUE?
  - a. They form large organisms composed of many different tissue types.
  - b. Algae are not human pathogens.
  - c. Dinoflagellates have silica in their cell walls.
  - d. Euglena cannot survive without chloroplasts.
  - e. They can live in symbiosis with corals.**
9. The influx of which two nutrients is known to cause algal blooms?
  - a. Phosphorus**
  - b. Sulfur
  - c. Nitrogen**
  - d. Mercury
  - e. Carbon
10. Algal blooms are dangerous to humans because \_\_\_\_\_.
  - a. They block the light, preventing photosynthesis.
  - b. Fish eat the algae and grow too large to catch.
  - c. They die and sink to the bottom, filling in natural waterways.
  - d. They are thick mats that boats cannot drive through.
  - e. They can release large amounts of toxins into drinking water.**