**Week 1 Questions Answer Key**

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| 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. |