

Name:

Date:

Core:

- What do we call a life-form that is so small we need to look at it through a microscope in order to see it? **(a microorganism)**
- How many microorganisms can live in one drop of water? **(hundreds or even thousands)**
- What do humans have in common with the smallest microorganisms? **(We are all made of cells.)**
- What is a cell? **(the basic unit of which all living things are composed)**
- How many cells does it take to make a living organism? **(Single-celled microorganisms have only one cell; larger organisms can have billions.)**
- How many cells are there in a human body? **(billions)**
- What parts do all cells contain, regardless of what organism they belong to? **(a nucleus, the control center of the cell; a substance called cytoplasm surrounding the nucleus, where many cell functions occur; a membrane, the sack-like container that holds the cell together)**
- What are the smallest microorganisms you can see with an ordinary microscope? **(bacteria)**
- Why are bacteria important? **(They are an essential food for other microorganisms.)**
- What is another important food source for many pond organisms? **(algae)**
- What are algae? **(plantlike organisms that appear in a variety of forms and belong to a larger group of organisms called protists)**
- What are protists? **(Protists belong to a group of organisms that are neither plant nor animal.)**
- How do algae obtain their food? **(through photosynthesis)**
- What is photosynthesis? **(a process by which plants and algae convert water and carbon dioxide into food using the energy of sunlight)**
- What is the green substance found in most algae? **(chlorophyll)**
- What are clusters of algae called? **(colonies)**
- What are protists that possess flagella called? **(flagellates)**
- What are protozoa and what does their name mean? **(Protozoa are common one-celled organisms found in pond water; their name means "first animals.")**
- What are protozoa that possess cilia called? **(ciliates)**
- What structures in protozoa allow them to take in and expel water? **(contractile vacuoles)**
- How do most protozoa reproduce? **(through fission)**
- What is the name of the process during which protozoa exchange cell material? **(conjugation)**
- What is the enclosure a protozoan forms when it enters a state of suspended animation? **(a cyst)**
- How does an amoeba move? **(by sending out streams of cytoplasm called pseudopods)**
- What are the bubbles that protozoa form to surround food? **(food vacuoles)**
- In what ways are protists important? **(They form the bottom of the food chain; some are responsible for producing most of the air we breathe; many are used in scientific studies; some are carriers of disease.)**