

Name: _____

Date: _____

Living Environment

Period: _____

Do Now #

Read the words in the box below. Think about whether they are LIVING or NONLIVING things. Write the words in the proper columns.

LIVING THINGS	NON LIVING THINGS
1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

Bacteria	fat	snakes	worms	sunlight
Mushroom	carbohydrates	carbon	cactus	rainfall
Oxygen	algae	temperature	fish	apple tree
Water	humans	soil	humidity	amoeba

21. What is a LIVING THING?

22. Explain why ROCKS are NONLIVING things.

Name: _____

Period: _____

Living Environment

Homework # _____

Base your answers to questions 1-3 on the information below. Use complete sentences for your answers.

We live on land. Even the very name *Earth* is used to mean land. But look at a world map and you will see a lot of blue space. In fact, more than 70 percent of Earth's surface is covered by water, mostly oceans. Unseen in these waters—drifting along with waves and currents—are countless numbers of tiny organisms. Photosynthetic bacteria, algae, and plants are included in these drifters. Some of these unicellular species are so small that if 12 million cells were lined up in a row, the line would be only about 1 centimeter long. In some places in the oceans, these microscopic organisms are so numerous that a cup of seawater may hold 24 million individuals of a single species, and that cup would contain other species as well!

These species are very small, but their importance to the overall life on the planet is huge. Tiny sea-dwelling organisms are the beginning food source for almost all living things in the oceans. It is easy for us land dwellers to understand that many animals eat plants to get food. We have seen cattle and sheep grazing on grasses in a pasture. The drifting cells in the ocean could be called the *fields or pastures* of the sea. Just like grass on land, the sea drifters capture energy from the sun and convert inorganic CO₂ and water into organic molecules, which become important foods for other organisms. On land, plants bloom with wild displays of colorful flowers in spring. The photosynthetic drifters in the sea are said to “bloom” in the spring, too, as the water warms and nutrients from ocean depths are brought to the surface by currents. A great deal has been learned recently about the seasonal explosive growth of these photosynthetic cells in the ocean from photographs taken by orbiting satellites.

1. Explain why the drifting cells in the ocean can be called pastures of the sea? (1 point) _____

2. Describe 3 ways in which microscopic drifting cells in the ocean are similar to plants on land? (3 points) _____

3. How has modern technology improved our ability to study life in the ocean? (1 point) _____