

Handout 2 (yellow) Oceanography

Name: _____ Period: _____

Life in the Oceans

Standard 4 Objective 3 Indicators b and c

Chapter 20: Section 2: Directed Reading Pages 501-504

Section: Life in the Oceans (page 501)

- _____ 1 What two major factors do marine organisms depend on for their survival?
- a. essential nutrients in ocean water and sunlight
 - b. density of ocean water and sunlight
 - c. essential nutrients in ocean water and density of ocean water

OCEAN CHEMISTRY AND MARINE LIFE (page 501)

2. Describe the chemistry of the ocean.

3. What are three elements absorbed by marine plants?

4. One way that nutrients return to the surface is through a process called _____.

5. Where are nutrients stored in the ocean?

6. What happens when wind blows steadily parallel to a coastline?

7. In what part of the ocean do most marine organisms live?

8. How do plankton form the base of food webs in the ocean?

9. Organisms such as dolphins and squid, that swim actively in open water, are called _____.

10. Organisms that live at the bottom of oceans or bodies of fresh water are called _____.

OCEAN ENVIRONMENTS (page 503)

Use the terms from the list below to complete the sentences that follow. Each term may be used only once.

- A. pelagic zone
- B. oceanic zone
- C. intertidal zone
- D. neritic zone
- E. benthic zone
- F. sublittoral zone

_____ 11. The term for the bottom region of oceans and bodies of fresh water is _____.

_____ 12. The term for the region of an ocean or body of fresh water above the benthic zone is _____.

_____ 13. This is the shallowest benthic zone, located between the low-tide and high-tide zones. Shifting tides make it a continually changing environment for marine organisms. It is called the _____.

_____ 14. Most organisms that live in the benthic zone live in this shallow zone. This constantly submerged area is located on the continental shelf and is home to sea stars, brittle stars, and sea lilies. It is called the _____.

_____ 15. The region of the pelagic zone above the continental shelves has abundant sunlight, moderate temperatures, and relatively low water pressure, which are ideal conditions for marine life. Nekton fill the area's waters and are the source of much of the fish and seafood that humans eat. It is called the _____.

_____ 16. The zone that extends into the deep waters beyond the continental shelf is divided into four zones based on depth. It is called the _____.

Chapter 3 Section 2 (GREEN ENVIRONMENTAL SCIENCE BOOK)

Section 2: Marine Ecosystems (pages 58-63)

LIFE IN THE OCEAN (page 58)

1. Tiny organisms that float near the surface of freshwater and marine environments are called _____.
2. How do plankton get their food?
3. What are three abiotic factors that affect marine ecosystems?

TEMPERATURE (page 59)

- _____ 4. How does the temperature of ocean water change as it gets deeper?
 - a. It decreases.
 - b. It increases.
 - c. It does not change.
 - d. It varies from day to day.
- _____ 5. Which ocean temperature zone has the warmest water?
 - a. deep zone
 - b. thermocline
 - c. surface zone
 - d. middle layer

DEPTH AND SUNLIGHT (page 60-61)

- _____ 6. warm water and a lot of sunlight; ocean floor starts to slope down
 - _____ 7. sea floor drops sharply; contains deep water of the open ocean
 - _____ 8. ocean floor; deepest parts get no sunlight
 - _____ 9. where the ocean meets the land; exposed to air part of the day
- a. intertidal zone
 - b. neritic zone
 - c. oceanic zone
 - d. benthic zone

A CLOSER LOOK (page 62)

10. Name three kinds of intertidal areas.
11. Name two ways certain organisms have adapted to living on rocky shores.
12. A place where fresh water from rivers mixes with salty ocean water is a(n) _____.
13. Does the polar ice ecosystem support much life? Explain why or why not.