



Marine & Coastal Environment

LOM 10103

BY

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Introduction

Facts of oceanic proportions:

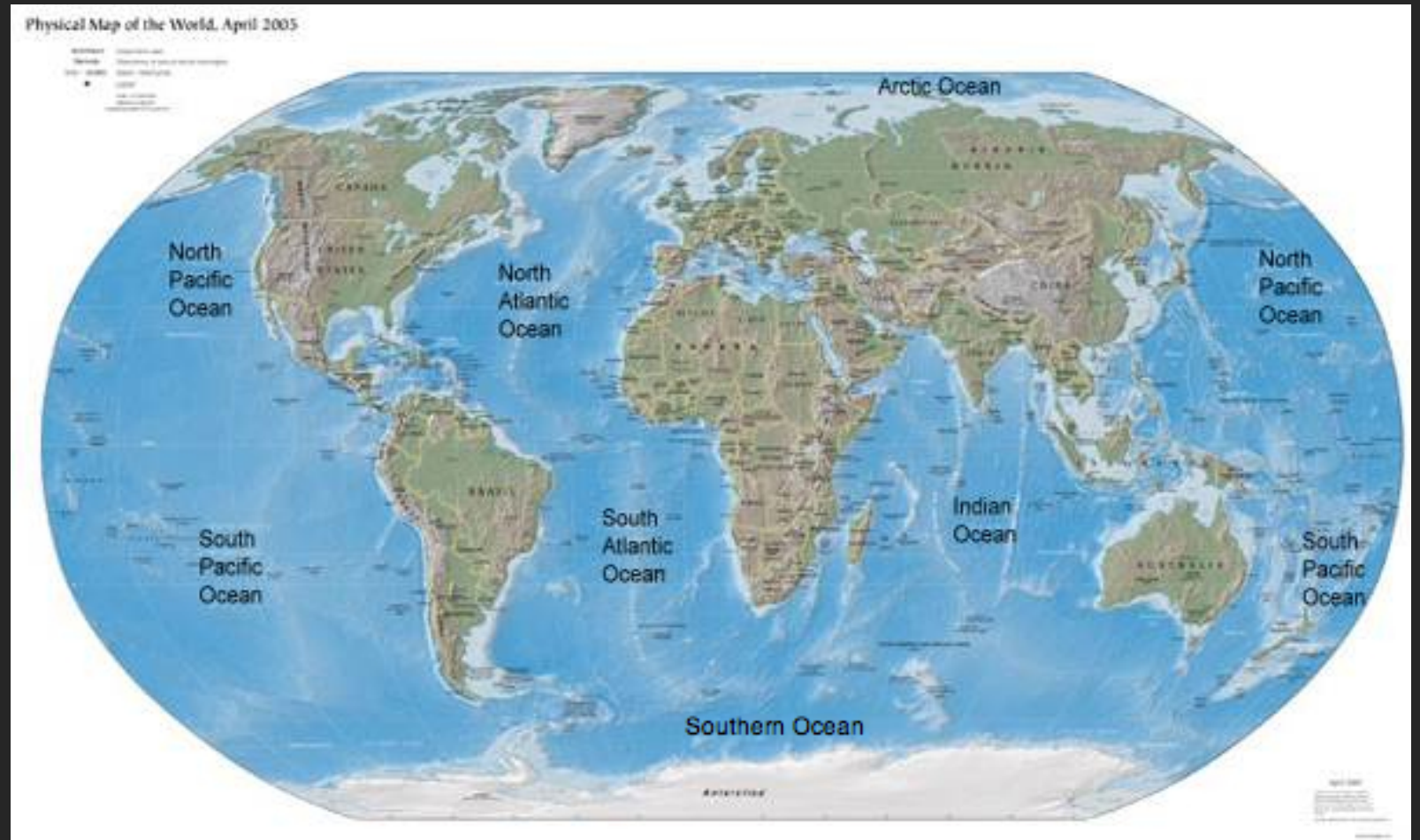
1. Covers 70.8% of Earth's surface.
2. <0.5% is freshwater.
3. Main reservoir of O_2 .
4. Earth's thermal reservoir and regulator.
5. Major reservoir for CO_2 .
6. Constitutes 5 major oceans.



5 Major Oceans

Facts of oceanic proportions:

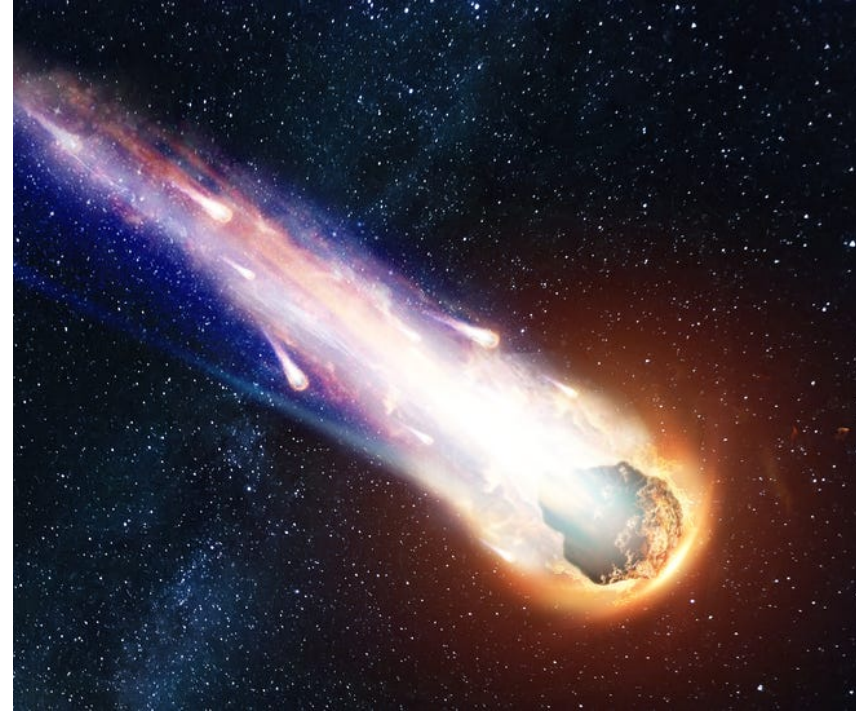
1. Pacific
2. Atlantic
3. Indian
4. Arctic
5. Southern



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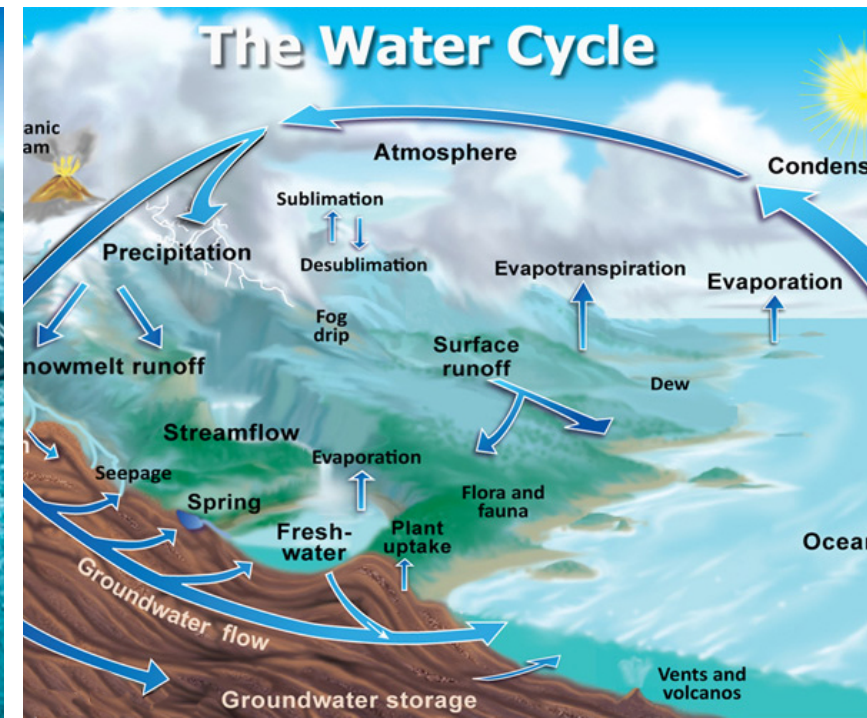
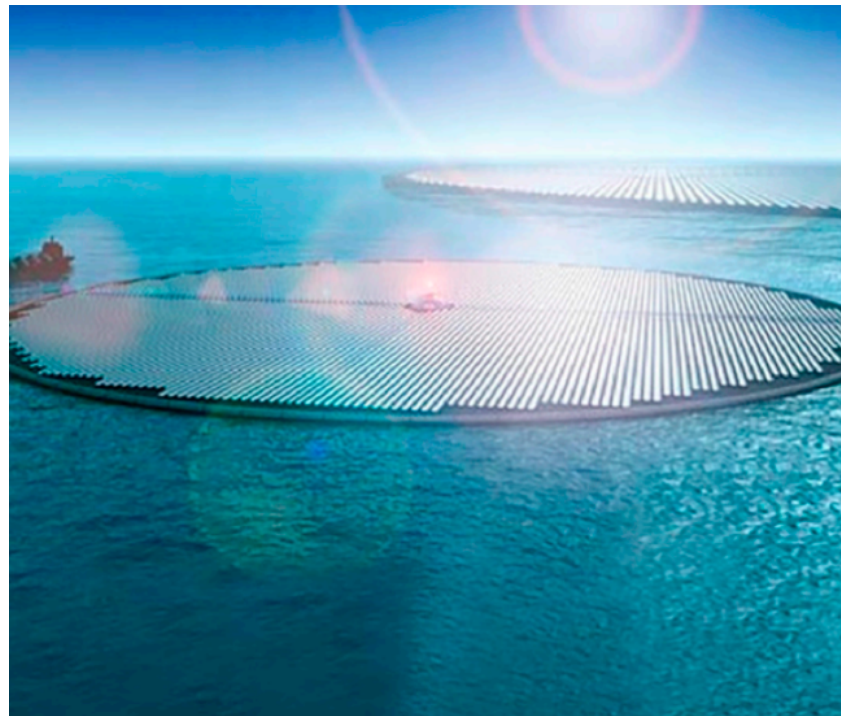
Evolution of Ocean

1. Where does Earth's water originates from?
2. Hypotheses?
 - a. Cosmic Gases
 - b. Comets
 - c. Meteorites
 - d. Wet Magma Ocean



Ocean and Humanity

1. Production Services
 - Food, raw materials
2. Cultural Services
 - Religion, Folklore, Tradition
3. Option Use Value
 - Alternative source of energy
4. Regulation Services
 - Gas & Climate Regulation
5. Supporting Services
 - Nutrient Cycling



Activity 1

List ocean resources that you use in your daily life. Discuss the positive and negative impacts of your use of two (2) of the resources.

Marine vs. Terrestrial

Similarities	Differences
<ul style="list-style-type: none">• Derive energy from the sun.	Size?
<ul style="list-style-type: none">• Occupied by inhabitants.	Physical Properties?
<ul style="list-style-type: none">• Diversity of species varies with latitude.	Temperature Range?
<ul style="list-style-type: none">• Diversity of species varies with longitude.	Light exposure? Phyla?
<ul style="list-style-type: none">• Primary biological activity happens near the surface.	Mobility? Boundary? Primary Production?



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Activity 2

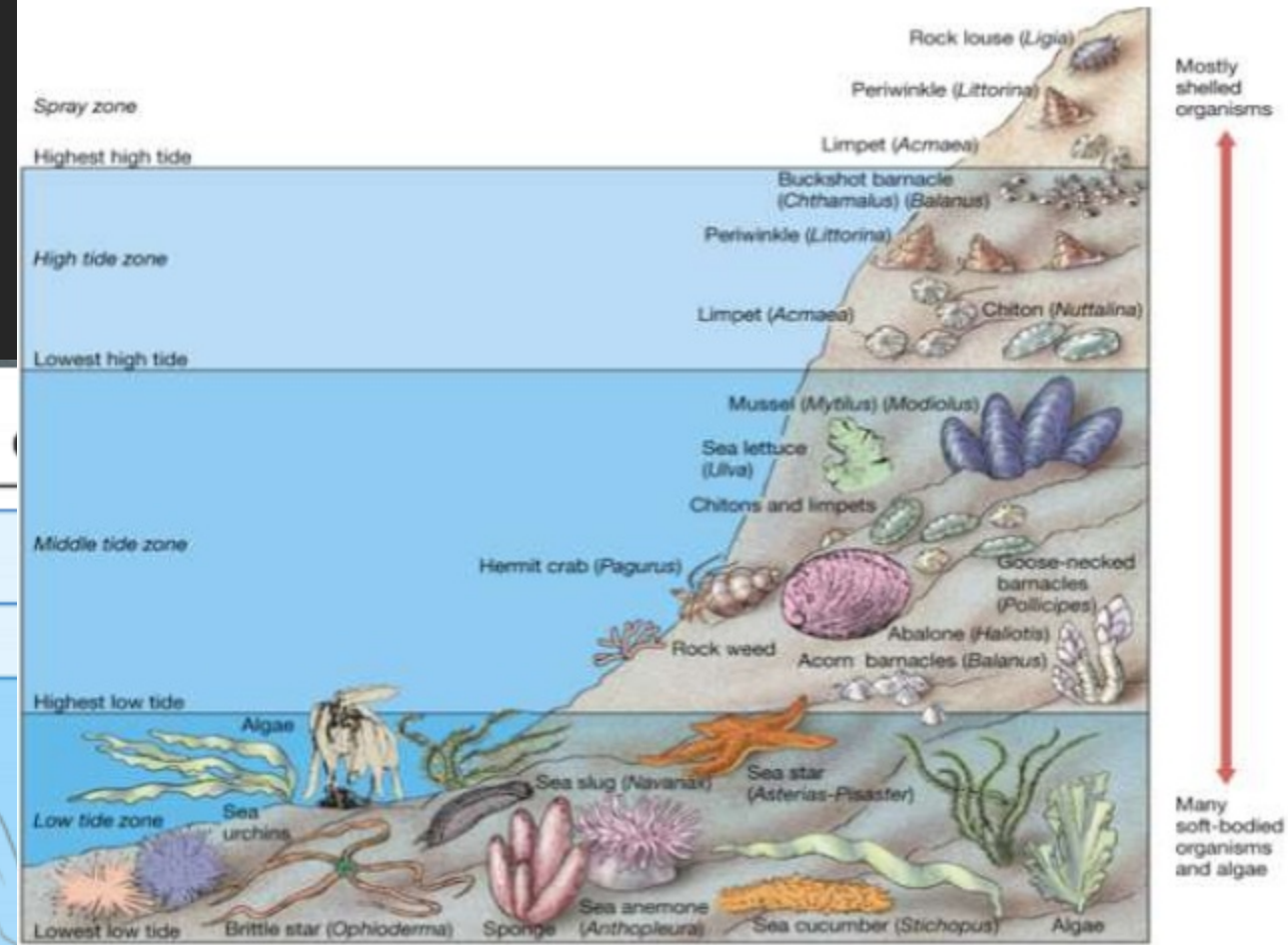
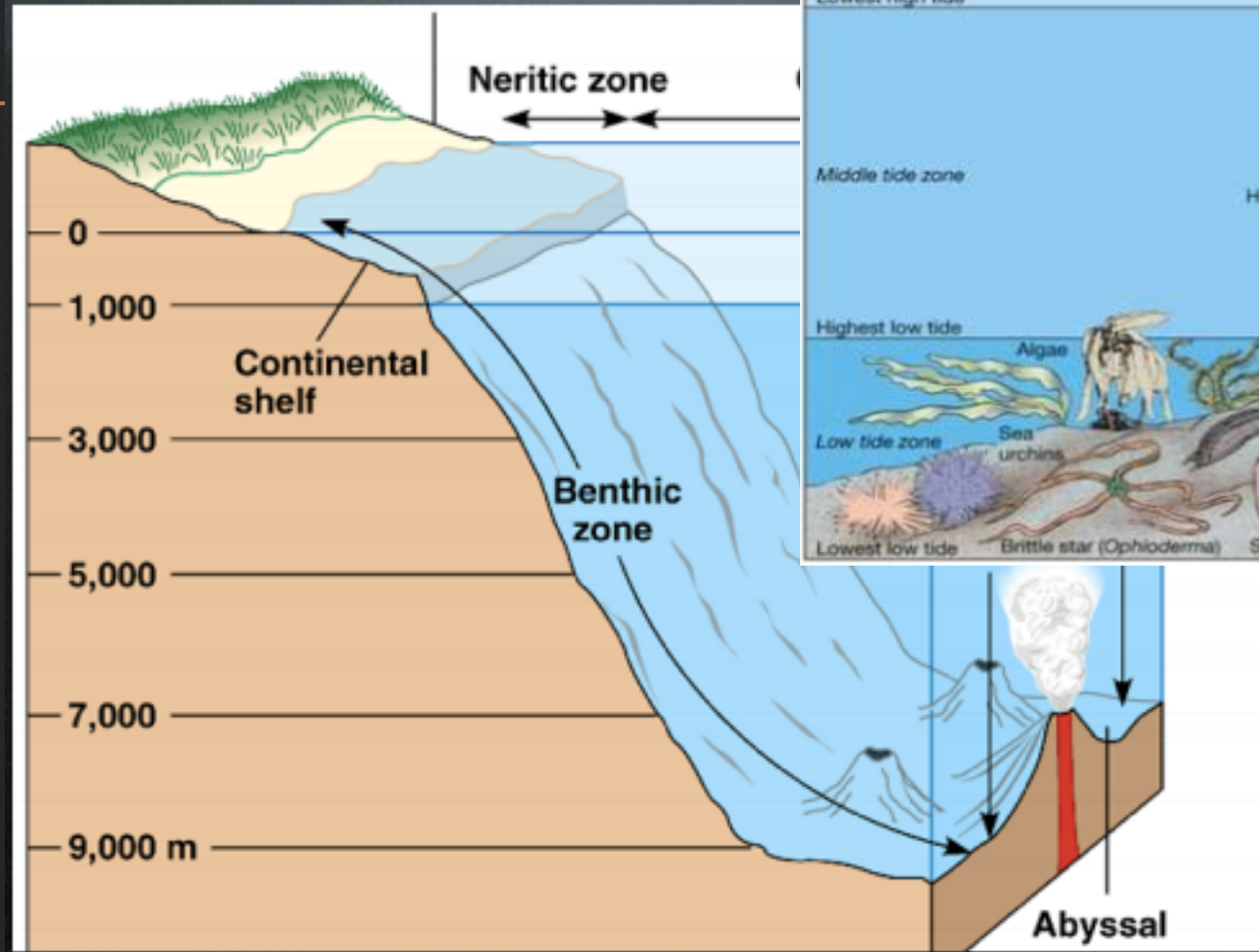
List 6 common characteristics associated to our ocean.

Activity 3

List five (5) differences between marine and terrestrial environment.


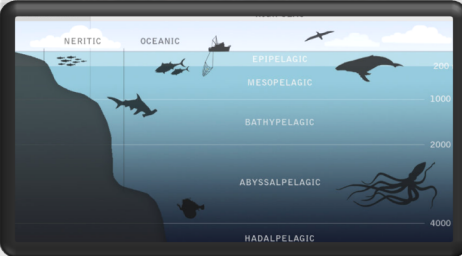
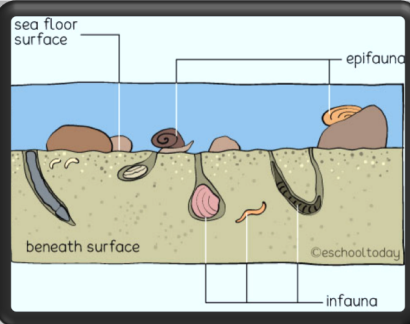
The Marine Environment

1. Pelagic & Benthic
2. Intertidal & Estuarine



Marine Biology

1. Consist of Flora and Fauna.
2. Classified according to realms.
 - a) Estuaries
 - b) Pelagic
 - c) Benthic
 - d) Deep Sea

Realm	Community Type	Example
Estuaries	Rocky Shores Corals Mangroves	
Pelagic	Fish, Marine Mammals, Marine Reptiles	
Benthic	Demersal Fish	
Deep Sea	Deep Sea Corals	