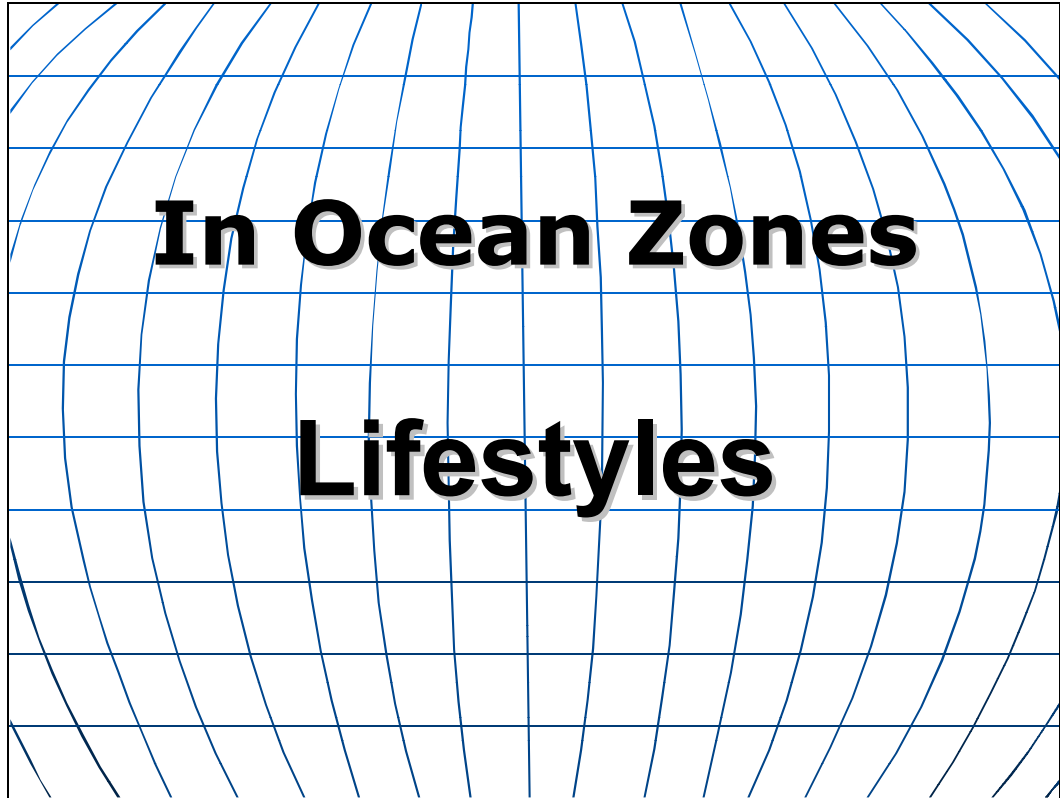


Slide 1



**In Ocean Zones**

**Lifestyles**

Slide 2

## **In The Zone Lifestyles**

Explanation:

This Power Point is included in this presentation as a review of basic terminology and information.

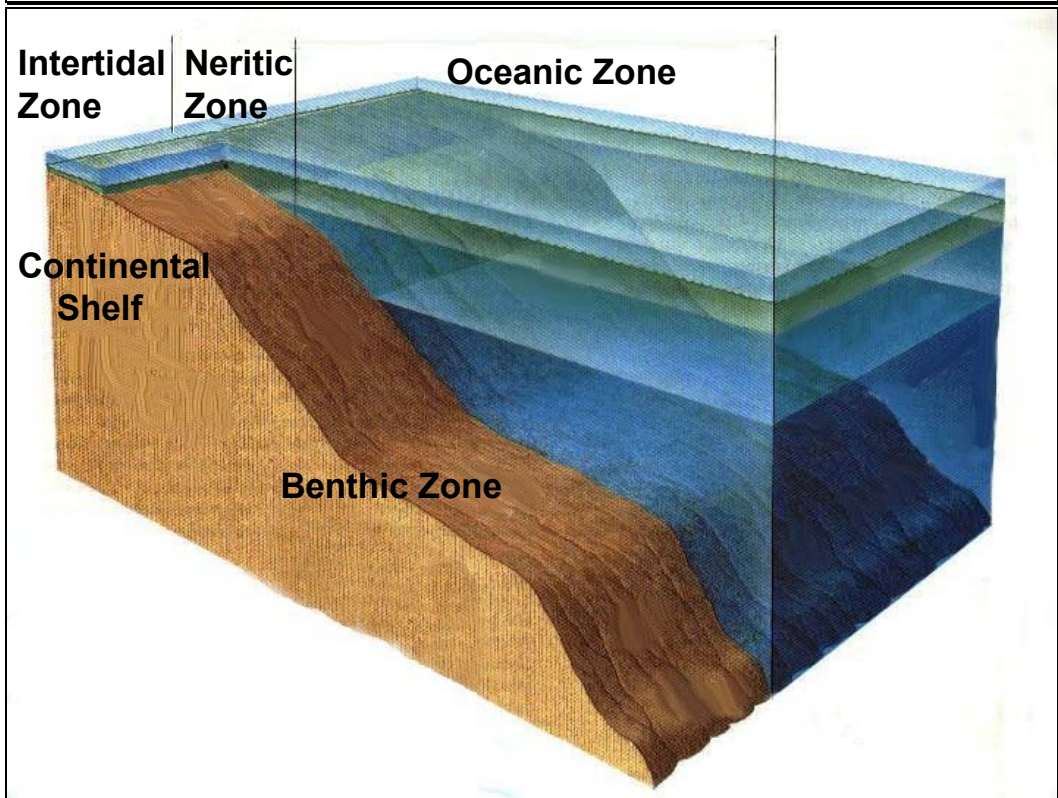
Slide 3

# Ocean Zones

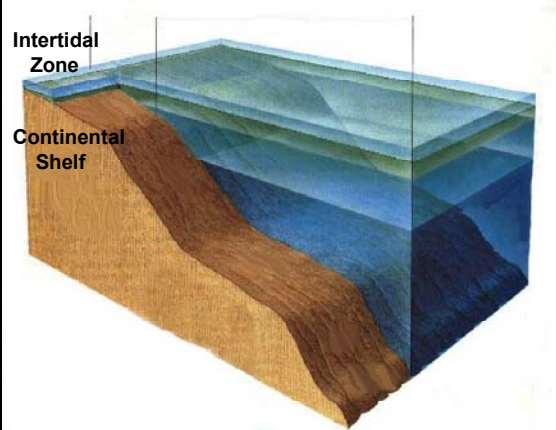
(shoreline to open ocean)

- Intertidal Zone
- Neritic Zone
- Oceanic Zone
- Benthic Zone

Slide 4

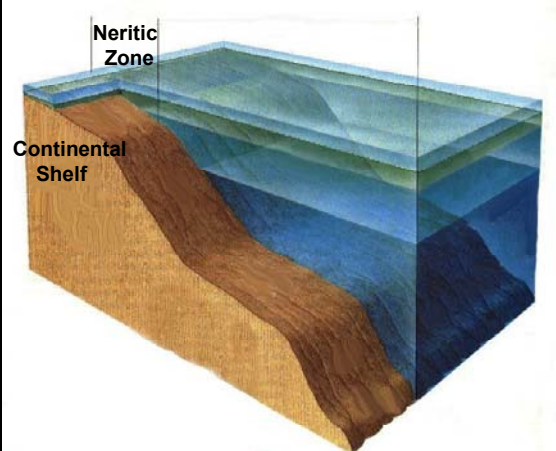


# Intertidal Zone



- Area between high tide line and low tide line
- Organisms adapted to harsh, changing environments

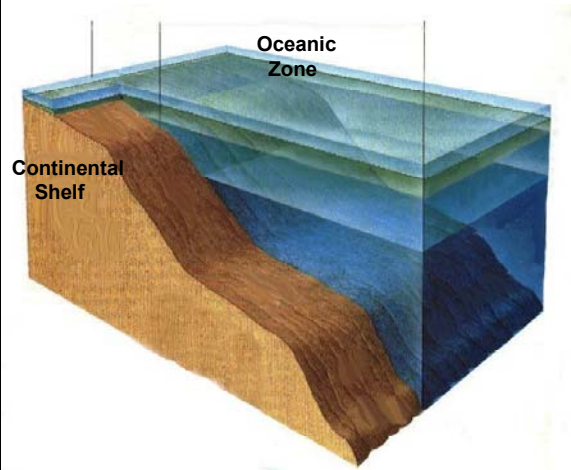
# Neritic Zone



- Area over the continental shelf
- Area of greatest density and diversity of marine life

Slide 7

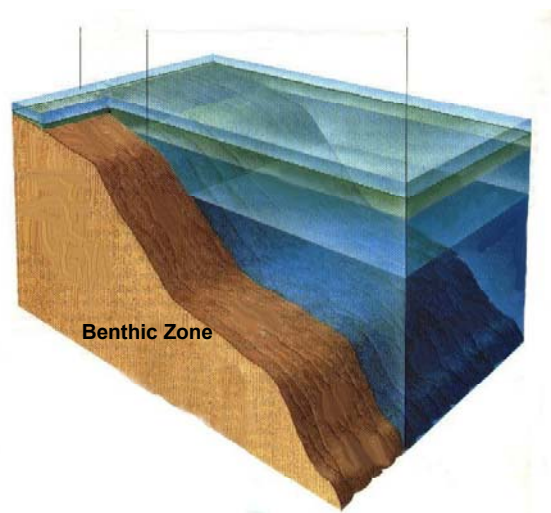
# Oceanic Zone



- From the continental break out to open ocean

Slide 8

# Benthic Zone

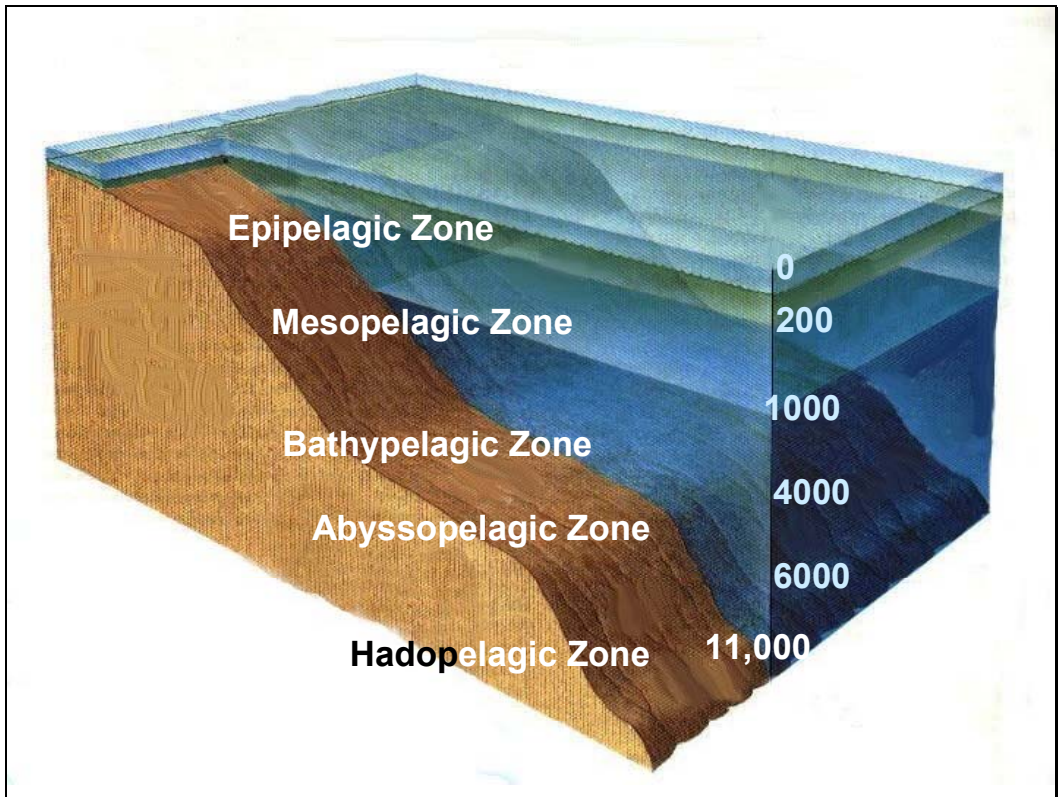


- The Ocean Floor
- Underlies all the other zones

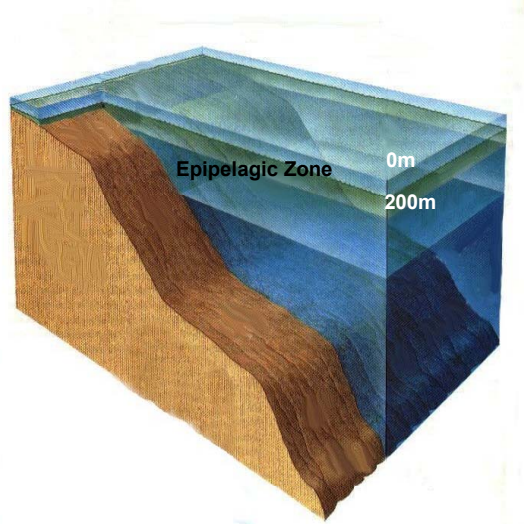
# Ocean Zones

(surface to ocean floor)

- Epipelagic Zone**
  - Photic Zone or Sunlight Zone
- Mesopelagic Zone**
  - Disphotic Zone or Twilight Zone
- Bathypelagic Zone**
  - Aphotic zone or Midnight Zone
- Abyssopelagic Zone**
  - Aphotic Zone or Midnight Zone
- Hadopelagic Zone**
  - Aphotic Zone or Midnight Zone

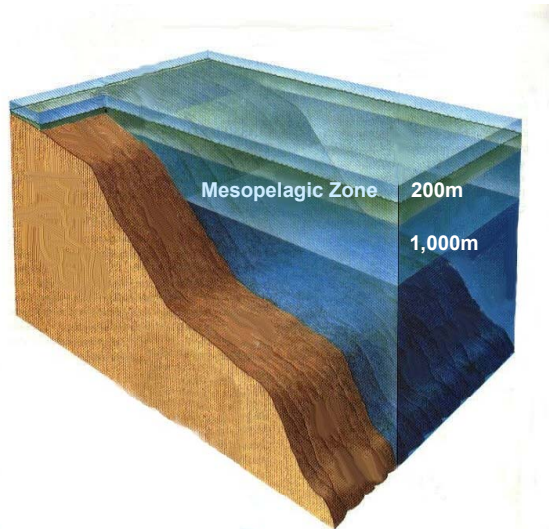


# Epipelagic Zone



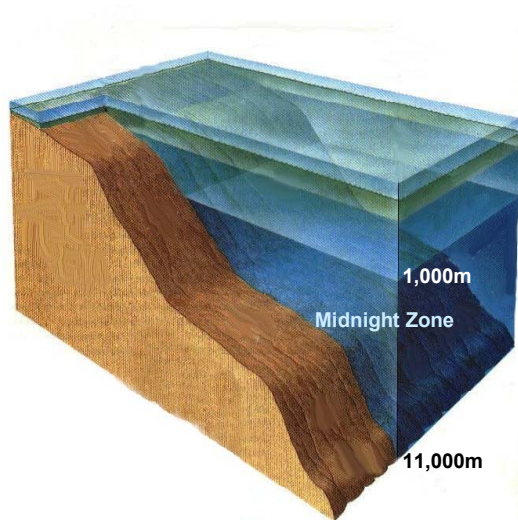
- Photic Zone
- Enough sunlight for photosynthesis
- Primary area of food production
- From surface down to about 200 meters

# Mesopelagic Zone



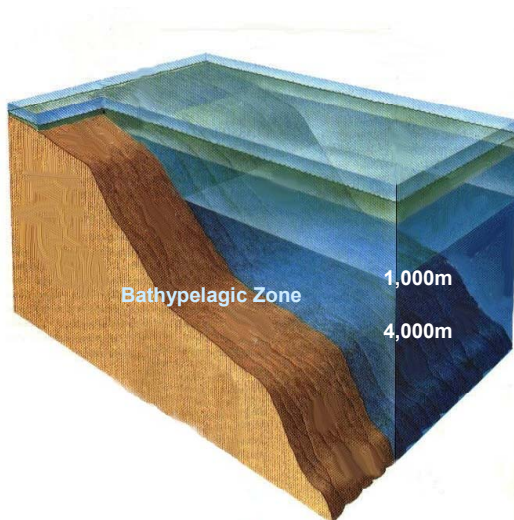
- Dysphotic Zone
- Not enough sunlight to support photosynthesis
- From about 200 m down to 1,000 m

# Midnight Zones



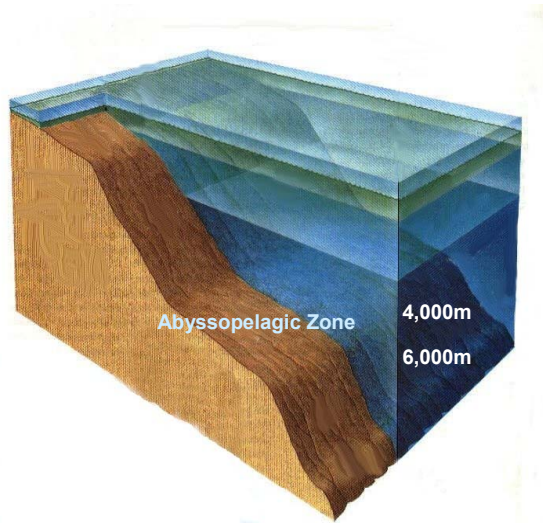
- No sunlight
- From 1,000 m down to ocean floor, or around 11,000 m
- Low density and diversity of marine life

# Bathypelagic Zone



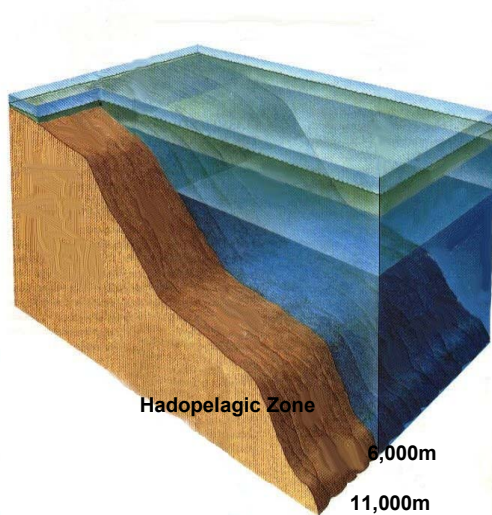
- No sunlight
- From 1,000 m down to 4,000 m
- Low density and diversity of marine life

## Abyssopelagic Zone



- No sunlight
- From 4,000 m down to 6,000 m
- Low density and diversity of marine life

## Hadopelagic Zone



- No sunlight
- From 6,000 m down to ocean floor, or around 11,000 m
- Low density and diversity of marine life



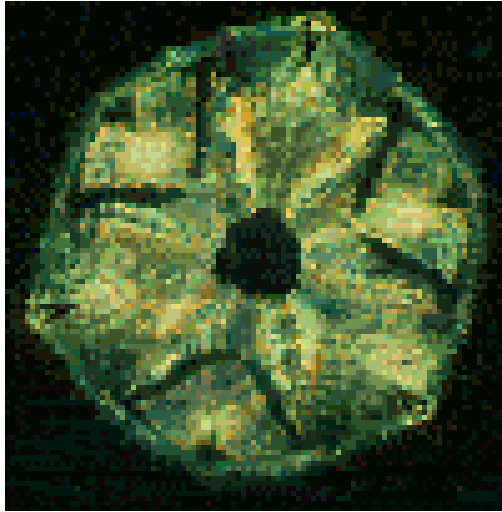
# Lifestyles

- 3 Basic Lifestyles:
  - Plankton
  - Nekton
  - Benthos

# Plankton

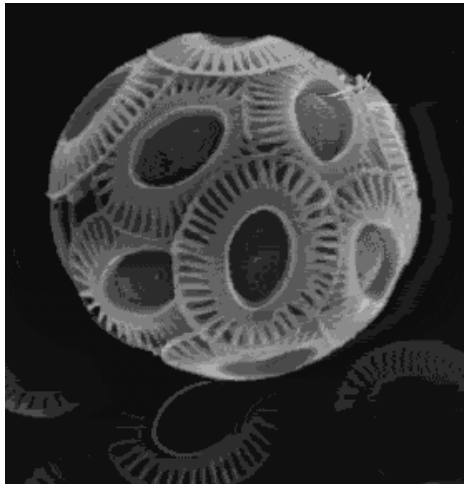
- Floaters or very poor swimmers
- Plankton divided into 2 groups:
  - Phytoplankton – producers, photosynthesizers
  - Zooplankton – consumers

# Phytoplankton



- Must live in the photic zone
- Most abundant in shallow coastal areas or in upwelling zones
- The basis of the oceanic food web

# Phytoplankton



- Cyanobacteria
- Diatoms
- Coccolithophores
- Dinoflagellates

# Zooplankton



- Foraminifers
- Radiolarians
- Cnidarians
- Combjellies
- Arthropods
- Larvae

# Zooplankton



## Plankton

### ■ Meroplankton

- Spend only part of their life cycles as plankton
- Are the larval stages of organisms that grow to become benthic or nektonic organisms

### ■ Holoplankton

- Spend their entire life cycles as plankton

## Nekton (swimmers)

- Free swimmers
- Maneuver actively in the water column
- Found in the water column from surface to ocean floor

Slide 25

# Nekton

(swimmers)



## ■ 5 Categories:

- Reptiles
- Mammals
- Fish
- Arthropods
- Mollusks

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# Nekton

(swimmers)



## ■ Marine Reptiles:

- Turtles
- Snakes
- Crocodiles
- Iguanas

Slide 27

# Nekton

(swimmers)



- Marine Mammals:
  - Whales
  - Seals
  - Otters
  - Manatees
  - Dolphins

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# Nekton

(swimmers)



- Bony Fish:
  - Tuna
  - Barracuda
  - Eels
  - Angler Fish

# Nekton

(swimmers)

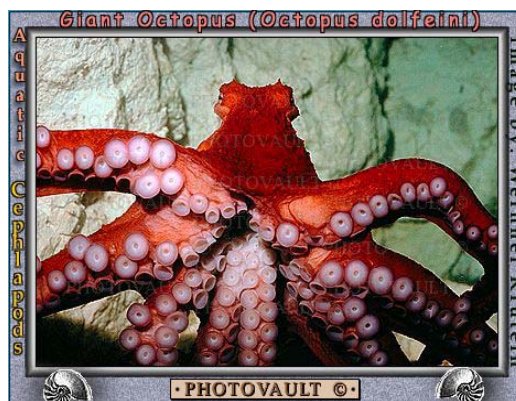


## ■ Cartilaginous Fish

- Sharks
- Rays
- Skates

# Nekton

(swimmers)



## ■ Marine Arthropods

- Shrimp

## ■ Mollusks

- Squid
- Octopi

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# **Benthos**

(bottom dwellers)

- Live either on or attached to the bottom
- Primarily filter feeders or scavengers

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# **Benthos**

(bottom dwellers)

- 2 Basic Types:
  - Sessile - Live attached to the bottom
  - Vagrant - Able to move about



# Benthos

(bottom dwellers)



## ■ Sessile:

- Barnacles
- Sponges
- Corals
- Sea Anemones
- Oysters
- Clams

# Benthos

(bottom dwellers)



## ■ Vagrant:

- Crabs
- Sea Stars
- Sea Cucumbers
- Sea Urchins
- Brittle Stars

Slide 35

# What Am I?



Slide 36

# What Am I?



Slide 37

# What Am I?



Slide 38

# What Am I?



Slide 39

# What Am I?



Slide 40

# What Am I?



Slide 41

# What Am I?



Slide 42

# What Am I?



# What Am I?

