|              | Aquatic Ecosystems Not  | ĊS                        |
|--------------|---|---------------------------|
| Daily Objec  | tives > What factors affect aquatic ecosystems?                                   |                           |
|              | ➤ What are the distinct ocean zones that make up matcharacteristics do they have? | arine ecosystems and what |
| Limiting Fa  | <b>ctors</b> - The limiting factors in water biomes are:                          |                           |
|              | <ul> <li>Amount of salt ()</li> </ul>   | )                         |
|              | <ul> <li>Amount of dissolved</li> </ul>   |                           |
| 2 Types of   | <br>Water Biomes  |                           |
|              | Rivers and streams  |                           |
|              | <ul> <li>Lakes and ponds</li> <li></li> </ul>                                     |                           |
|              | – Oceans  |                           |
|              | <ul> <li>Seashore (tidal areas)</li> </ul>  |                           |
| Freshwa      | ter Ecosystems  |                           |
| Freshwater c | contains little or no salt, so it has a low                                       | ·                         |
|              | - Flowing freshwater =  |                           |
|              | - Standing freshwater =   |                           |
| Streams      | - The a stream flows the  | the amount of             |
|              | in it.  |                           |
|              | - The fish that live in streams are   | _ to fast moving water.   |
| Rivers       | - Water moves in a river and  | settles on the bottom.    |
|              | - Because of this, rivers tend to have  | and                       |
| Ponds        | bodies of water.  |                           |
| 0:00         | - Sunlight penetrates   | to the bottom.            |
| Lind         | - Most are with   | plant material.           |
|              | - Very amount of  |                           |

| of water biomes.         - They   | Lakes                               | and                                   | than ponds                    |                                |  |  |
|---|-------------------------------------|---------------------------------------|-------------------------------|--------------------------------|--|--|
| Plankton       • Microscopic,, and other organisms that float on the surface of water biomes.         • They to survive.         • They to survive.         • They are the step in many aquatic         Wetlands - A wetland is an ecosystem in which water either covers the soil or is present at or near the surface of the soil for at least part of the year.         The water in a wetland may be or standing.         It may contain water that is or brackish.         Brackish means that it is a mixture of and or brackish.         1.  |                                     | - Plant growth is limited to the      |                               |                                |  |  |
| of water biomes.         - They   |                                     | - Sunlight J                          | penetrate to the bottom = no  | plants after a certain depth!  |  |  |
| They  | Plankton                            | - Microscopic,                        | , and other organ             | isms that float on the surface |  |  |
|   | ~ ‡                                 | of water biomes.                      |                               |                                |  |  |
| - They are thestep in many aquatic Wetlands - A wetland is an ecosystem in which water either covers the soil or is present at or near the surface of the soil for at least part of the year. The water in a wetland may be or standing. It may contain water that is or brackish. Brackish means that it is a mixture of or brackish. Brackish means that it is a mixture of and or brackish. Brackish means that it is a mixture of and water. There are 3 types of freshwater wetlands: 1. 2. 3. Bogs: These are wetlands that are dominated by, usually in depressions where collects. This water is often very Marshes: Marshes are wetlands along rivers. Marshes often contain, rushes, and other tall grasses. Swamps: Swamps look like flooded Water moves through a swamp. The presence of trees and shrubs |                                     | - They                                | to survive.                   |                                |  |  |
| Wetlands - A wetland is an ecosystem in which water either covers the soil or is present at or near the surface of the soil for at least part of the year.         The water in a wetland may be or standing.         It may contain water that is, or standing.         It may contain water that is, or brackish.         Brackish means that it is a mixture of and or brackish.         In the ease of the sold freshwater wetlands:         1.   |                                     |                                       | are important                 | in water biomes.               |  |  |
| surface of the soil for at least part of the year.         The water in a wetland may be or standing.         It may contain water that is, or brackish.         Brackish means that it is a mixture of and or brackish.         Brackish means that it is a mixture of and or brackish.         1.   | <i>p</i> ·                          | - They are the step                   | in many aquatic               |                                |  |  |
| It may contain water that is, or brackish. Brackish means that it is a mixture of and water. There are 3 types of freshwater wetlands: 1. 2. 3. 4. Bogs: These are wetlands that are dominated by, usually in depressions 4. 4. 4. 5. 4. 4. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.   |                                     | surface of the soil for at least part | of the year.                  | or is present at or near the   |  |  |
| Brackish means that it is a mixture of and water.         There are 3 types of freshwater wetlands:         1.  |                                     |                                       |                               | or brackish                    |  |  |
| There are 3 types of freshwater wetlands:         1.  |                                     |                                       |                               |                                |  |  |
| 1.  |                                     |                                       | and                           | water.                         |  |  |
| <ul> <li>2</li></ul>  | •                                   | -                                     |                               |                                |  |  |
| 3.  |                                     |                                       |                               | -                              |  |  |
| Bogs: These are wetlands that are dominated by, usually in depressions where collects. This water is often very         Marshes: Marshes are         Marshes: Marshes are         Marshes often contain         Swamps: Swamps look like flooded         Water moves  |                                     |                                       |                               | -                              |  |  |
| where collects. This water is often very         Marshes: Marshes are         Marshes: Marshes are         Water moves         Water moves  | 5.                                  |                                       |                               | -                              |  |  |
| where collects. This water is often very         Marshes: Marshes are         Marshes: Marshes are         Water moves         Water moves  | Bogs: These                         | are wetlands that are dominated by    |                               | , usually in depressions       |  |  |
| Marshes:       Marshes are wetlands along rivers.         Marshes often contain, rushes, and other tall grasses.         Swamps:       Swamps look like flooded         Water moves through a swamp.       The presence of trees and shrubs   |                                     | where                                 | _ collects. This water is off | en very                        |  |  |
| Marshes often contain, rushes, and other tall grasses. Swamps: Swamps look like flooded Water moves   |                                     | ·                                     |                               |                                |  |  |
| Marshes often contain, rushes, and other tall grasses. Swamps: Swamps look like flooded Water moves   |                                     |                                       |                               |                                |  |  |
| Swamps: Swamps look like flooded         Water moves through a swamp. The presence of trees and shrubs  | Marshes: Marshes are wetlands along |                                       | ng rivers.                    |                                |  |  |
| Water moves through a swamp. The presence of <u>trees and shrubs</u>  | Marshes often                       | n contain                             | , rushes, and oth             | er tall grasses.               |  |  |
| Water moves through a swamp. The presence of <u>trees and shrubs</u>  | Swamps: Sw                          | amps look like flooded                |                               |                                |  |  |
|   | -                                   | -                                     |                               |                                |  |  |
| distinguishes a swamp from a marsh.   |                                     |                                       |                               | <u></u>                        |  |  |

## Saltwater Ecosystems

| Saltwater | - About | _% of the water on Earth has a high concentration of | • |
|-----------|---------|--|---|
| (High     | )       |  |   |

| Estuaries           | - Area where a               | meets an  |              |
|---------------------|------------------------------|---|--------------|
| Fresh Brackish Self | of sal                       | t and freshwater                                |              |
| Coan                | - Located near               | , border land                                   |              |
|                     | - Extremely                  |   |              |
|                     | - Nutrient levels are        | than both salt and t                            | freshwater   |
| Seashores           |                              | have a huge influence on life here              |              |
|                     |                              | portion of the shoreline                        | e that is    |
|                     | with                         | water at high tide and exposed to the           | at low tide. |
|                     | - Can be sandy or 1          | rocky   |              |
|                     | - Small fish, clams          | , crabs, other mussels are trapped in the       |              |
|                     |                              | during low tide                                 |              |
|                     |                              |   |              |
| Oceans              | - Can be divided in          | nto 2 main life zones:                          |              |
|                     | 1                            | Sunlight penetrates                             |              |
|                     | 2                            | NO sunlight                                     |              |
|                     |                              | C C   |              |
| Photic Zone         | - Above meters               |   |              |
|                     | - Sunlight penetrates        |   |              |
|                     | - Plant life and animal life | is  |              |
|                     |                              |   |              |
| Aphotic Zone        | e - Sunlight                 | penetrate                                       |              |
|                     | - There are                  |   |              |
|                     | - Animal life is             |   |              |
|                     |                              | f the deep ocean have a special adaptation know | own as       |
|                     | ,                            |   |              |
|                     |                              |   |              |