Ecology Review Unit #3: Ecosystem in a Bottle

1. What is a closed ecosystem?
2. Water Chemistry:

|  |  |  |
| --- | --- | --- |
| Test | **What is it** |  |
| **Nitrates** |  | **🞎 How do you balance it?**  **🞎 What causes a(n):**   |  |  | | --- | --- | | **Increase** | **Decrease** | |  |  | |
| **Nitrites** |  | **🞎 How do you balance it?**  **🞎 What causes a(n):**   |  |  | | --- | --- | | **Increase** | **Decrease** | |  |  | |
| **pH** |  | **🞎 How do you balance it?**  **🞎 What causes a(n):**   |  |  | | --- | --- | | **Increase** | **Decrease** | |  |  | |

1. Observation types:
   1. What is the difference between a quantitative and qualitative observation?
   2. Give an example of each
2. Provide a justification for the following:

|  |  |
| --- | --- |
| **Scenario** | **Justification** |
| Putting the terrestrial chamber above the aquatic chamber. |  |
| Adding activated carbon to the aquatic environment. |  |
| Gravel/sand at the bottom of the terrestrial environment. |  |
| Elodea fully submerged in the aquatic environment. |  |

1. Species requirements:

|  |  |  |
| --- | --- | --- |
| **Species** | **Requirements** | **How they are met in a closed ecosystem** |
| Common Name |
|  | **1) CO2 Supplier**  **2) Water**  **3) Nutrients**  **4)**  **5)** | **:**  **:**  **:**  **:**  **:** |
|  | **1) O2 Supplier**  **2) Water**  **3) Nutrients**  **4)**  **5)** | **:**  **:**  **:**  **:**  **:** |
|  | **1)**  **2)**  **3)**  **4)**  **5)** | **:**  **:**  **:**  **:**  **:** |

**Rest of Finals Packet:**

|  |  |
| --- | --- |
| Unit#1: Introduction | Unit#2: |
| 🞎 **8. REVIEW:** Redwood and Oak Woodland  🞎 **9. QUIZ:** Redwood and Oak Woodland  🞎 **15. LAB:** Turtle Lab Report & Rubric  🞎 **16. STUDY GUIDE**: Invasive Species  🞎 **17. QUIZ:** Invasive Species  🞎 **20. REVIEW:** Freshwater Review  🞎 **21. EXAM:** Unit1 | 🞎 **3. LAB**: Bioaccumulation (Lab Q’s and Post Lab Research)  🞎 **7. REVIEW**: Unit 2  🞎 **9. Exam:** Unit 2 |