**Answer sheet: *Geographic Gradients in Community Patterns of Forest Trees***

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. North America latitudinal transect 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **State** | **Species Richness** | **Most Abundant Species (MAS)** | **MAS % Dominance** |
|  |
| **1** | **Alaska** | **10** | ***Tsuga heterophylla*** | **39** |
| **2** | **Washington** |  |  |  |
| **3** | **Oregon** |  |  |  |
| **4** | **California** |  |  |  |

Rank Abundance Curve:

1a. *Do you detect the expected latitudinal gradient in species richness?*

1b. *Do you detect the expected latitudinal gradient in dominance by the most abundant species?*

1b. *Is there a latitudinal gradient in species evenness?*

2. North America latitudinal transect 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **State** | **Species Richness** | **Most Abundant Species (MAS)** | **MAS % Dominance** |
|  |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |
| **4** |  |  |  |  |

Rank Abundance Curve:

3. North America latitudinal transect 3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **State** | **Species Richness** | **Most Abundant Species (MAS)** | **MAS % Dominance** |
|  |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |
| **4** |  |  |  |  |

Rank Abundance Curve:

4. North America latitudinal transect 4

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **State** | **Species Richness** | **Most Abundant Species (MAS)** | **MAS % Dominance** |
|  |
| **1** |  |  |  |  |
| **2** |  |  |  |  |
| **3** |  |  |  |  |
| **4** |  |  |  |  |

Rank Abundance Curve:

5. *Do you detect the expected latitudinal gradient in species richness?*

6. *Do you detect the expected latitudinal gradient in dominance by the most abundant species?*

7. *Is there a latitudinal gradient in species evenness?*

8. *Are the coastal sites more species rich and even in relative abundance than continental interior sites of the same latitude?*

9. *If there are species rank abundance patterns that don’t appear to fit the expected gradients, can you provide a hypothesis that may account for the patterns you do see?*