Plant Evolution Essay Rubric

Edited

TOC#4

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|  | | 🞎 Title | |  |
| **¶1** | Introduction | ☐ Introduce paper  ☐ Phylogenetic tree  plantkingdom.gif | | ☐ Characteristics of plants  1.Chloroplasts  2.Cell wall  3.Photosynthesis  ☐ Connection to the rest of the food web |
| **¶2** | Charophytes | ☐ Identify as green algae  ☐ Not True plants  ☐Ancestral Plants  ☐ Live in water  Unless as lichen | | ☐Non Vascular  ☐Effect on shape: Long and Skinny to promote osmosis  ☐ Spirogyra |
| **¶3** | Bryophytes | ☐ Identify as moss  ☐ Live on land  ☐ Non Vascular  ☐Effect on shape  ☐ Phylid not Leaf, Rhizoid Not Root - Why?  ☐ How do they hold onto water? | | ☐ NO Seed (spore instead)  ☐ Do they rely on water for reproduction? (Yes, why?) |
| **¶4** | Adapt 2 Land | Adaptation to Land:  🞎 Major problem they need to deal with on land  🞎 Hold Water  - Stomata + Cuticle | | 🞎 Move Water  - Vascular Tissue (Xylem/Phloem) + Transpiration |
| **¶5** | Pterophytes | ☐ Identify as Ferns  ☐ Live on land  ☐ Vascular  ☐Effect on shape: | | ☐ NO Seed (spore instead)  ☐ Sori  ☐ Do they rely on water for reproduction? |
| **¶6** | Gymnosperms | ☐ Identify as Conifers/Pine trees  ☐ Live on land  ☐ Vascular  ☐Effect on shape: Can grow REALLY tall  ☐Why? They have AMAZING VASCULARITY  ☐ How do they move water  ☐ Xylem for water  ☐ Phloem for food | | ☐ Seed  ☐ Do they rely on water for reproduction? (No: Can live farther from water)  ☐ In cone  ☐ Connect Cone to Flower |
| **¶7** | Angiosperms | ☐ Identify as Flowering Plants  ☐ Live on land  ☐ Vascular  ☐Effect on shape: Can grow tall  ☐ How do they move water  ☐ Xylem for water  ☐ Phloem for food | | ☐ Seed  ☐ Do they rely on water for reproduction? (No: Can live farther from water)  ☐ Flower  ☐ Why are flowers pretty? |
| **¶8** | Conclusion | ☐ Explain what evolution is, why and how organisms do it.  ☐ Conclude about the evolution of plants  ☐ A slow process = Takes many/small steps  ☐ Define and include: **Derived, Ancestral, Evolution, Adaptation, Natural Selection** | | |
| **End** | Bib | ☐ Used 2 references  ☐ Cited in text  ☐ Organized into bibliography at the end of paper | | |
| **Score** | | | \_\_\_\_\_/\_\_\_\_\_\_ | |