Kidney Evolution Paper

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|  | | **A** | **B** | **C** | **D** | **F** |
| /5 | Title: Descriptive |  |  |  |  |  |
| /20 | Introduction: |  |  |  |  |  |
|  | Explain homeostasis: |  |  |  |  |  |
|  | Explain water balance in terms of homeostasis: |  |  |  |  |  |
|  | Kidney: (10)   * Introduce the Kidneys role in water balance. * Where is it located * What organisms have it? |  |  |  |  |  |
|  | | | | | | |
| /25 | Evolution of Water Balance in Organisms: |  |  |  |  |  |
|  | 1. Unicellular (Paramecium) 2. Multicellular (Planaria) 3. Organismal:    * In Water:      + Insects      + Fish (Fresh/Salt)    * On Land:    * Amphibian  * Reptiles * Birds (salt glands) * Mammals |  |  |  |  |  |
|  | | | | | | |
| /25 | Kidney Form and Function: |  |  |  |  |  |
|  | - Describe the structure of a kidney |  |  |  |  |  |
|  | - Relationship between kidney and nephron |  |  |  |  |  |
|  | - Discuss function/structure of each piece of nephron |  |  |  |  |  |
|  | - Explain the concentration gradient with the loop of henle |  |  |  |  |  |
|  | - Implications if a kidney fails |  |  |  |  |  |
|  | - Why would it be better to drink pee than let your kidney stop having something to filter? |  |  |  |  |  |
|  | | | | | | |
| /10 | After Script: |  |  |  |  |  |
|  | Figure: Reference in text |  |  |  |  |  |
|  | References   * Minimum of 3 * Sited at the end in APA/MLA format * Sited in Text |  |  |  |  |  |
|  | | | | | | |