CELL SIGNALING PROJECT

Model and describe one of the four types of membrane receptors: G-protein linked, tyrosine kinases, ion channels or phosphorylation cascade. You will need to create a **2D/3D interactive model** of how your type of signaling works in the cell as well as a **write-up** explaining how to use the model and what is happening in each step. **Think of your project as an interactive presentation that will teach others about cell signaling**.

Your project should include the following:

* Interactive model that can be *manipulated* to model each step of the signaling pathway
* Step by step instructions of how to manipulate the model
* An explanation of what is occurring in each step and that step’s role in the pathway

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **4–Exemplary** | **3–Satisfactory** | **2–Needs Work** | **1-Unsatisfactory** |
| Content  (x3) | All steps of the pathway are clearly explained. | All steps of the pathway are explained. | Almost all steps of the pathway are explained or some steps are unclear. | Some steps of the pathway are missing or steps are unclear. |
| Effort  (x1) | Project is creative and thoughtful. It is neat and well organized. | Project is thoughtful. It is neat and well organized. | Project is somewhat neat and organized. May not be thoughtful/ creative. | Project is lacking in neatness and/or organization. |
| Ease of Use  (x1) | Project is an effective teaching tool and is intuitive to use. | Project works as a teaching tool and is easy to use. | Project works as a teaching tool but requires help to use properly. | Project is not easy to use or is confusing. |

|  |  |  |
| --- | --- | --- |
| **GROUP SCORE SHEET** | | |
| **Students** | **Initial Score** | **Final Score** |
|  |  |  |
|  |  |  |
|  |  |  |
| **TOTAL** |  |  |

**TOTAL = \_\_\_\_\_\_\_\_\_\_/ 20**