**Systems Writing Prompt – Plate Tectonics**

**Name: Date: Period:**

A system is a collection of parts and processes that interact with each other within defined boundaries. The layers of the Earth including the lithosphere, asthenosphere, and the core interact to drive plate tectonics, sea floor spreading and continental drift. In the space below explain how these layers interact.

In your answer be sure to:

* Describe the process of plate tectonics and continental drift
* How the layers are interacting
* The name and explanation of the heat transfer process driving this mechanism

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| **Systems Writing Rubric** |
| **4 Points** | **3 Points** | **2 Points** | **1 Point** | **0 Point** |
| Shows mastery of what an Earth system is; Identifies a specific example of an Earth system related to given topic and; Identifies and thoroughly explains specific interactions that occur both in the system and out of the system; ~~Identifies and thoroughly explains the effect of human activities on the system~~ | Shows mastery of what an Earth system is; Identifies a specific example of an Earth system related to given topic and; Identifies and explains specific interactions that occur both in the system and out of the system; ~~Identifies and explains the effect of human activities on the system~~ | Shows some mastery of what an Earth system is; Identifies a specific example of an Earth system related to given topic and; Identifies specific interactions that occur both in the system and out of the system; ~~Identifies the effect of human activities on the system~~ | Shows some mastery of what an Earth system is; Identifies a specific example of an Earth system related to given topic and; Partially identifies specific interactions that occur both in the system and out of the system; ~~Partially identifies the effect of human activities on the system~~ | Shows no mastery of what an Earth system is; Unable to or struggles to identify a specific example of an Earth system related to given topic and; Unable to or struggles to identify specific interactions that occur both in the system and out of the system; ~~Unable to or struggles to identify the effect of human activities on the system~~ |