Rubric 1: **Rubric 1 evaluates student responses to Question 1.**

Emerging	Developing	Proficient	Advanced
Student creates a model that **partially or inaccurately** identifies the stages of the rock cycle process, but does not provide an explanation of the processes involved, nor the rock types created. OR **Student response is missing.**	Student creates a model that **accurately** identifies the stages of the rock cycle process, but does not name the rock types created and gives little or no explanation of the processes involved.	Student creates a model that **accurately** identifies the stages of the rock cycle process, **partially or inaccurately** names the rock types created, and provides a general explanation of the processes involved.	Student creates a model that **accurately** identifies the stages of the rock cycle process, **correctly** names the rock types created, and provides a **detailed** explanation of the processes involved.

Rubric 2: **Rubric 2 evaluates student responses to Question 2.**

Emerging	Developing	Proficient	Advanced
Student **inaccurately** identifies the name of the plate boundary and **incompletely or inaccurately** explains the process of how volcanoes form. OR **Student response is missing.**	Student **accurately** identifies the name of the plate boundary and **incompletely or inaccurately** explains the process of how volcanoes form.	Student **accurately** identifies the name of the plate boundary and **generally** explains the process of how volcanoes form.	Student **accurately** identifies the name of the plate boundary and **accurately and specifically** explains the process of how volcanoes form.

Rubric 3: **Rubric 3 evaluates student responses to Question 3.**

Emerging	Developing	Proficient	Advanced
Student **inaccurately** identifies the volcano posing the greatest threat and in need of monitoring. OR Student **accurately** identifies the volcano posing the greatest threat and in need of monitoring, but does not provide reasoning. OR **Student response is missing.**	Student **accurately** identifies the volcano posing the greatest threat and in need of monitoring, and provides **general** knowledge and reasoning in their recommendation.	Student **accurately** identifies the volcano posing the greatest threat and in need of monitoring, and provides **partial** knowledge and reasoning in their recommendation.	Student **accurately** identifies the volcano posing the greatest threat and in need of monitoring, and provides **detailed** knowledge and reasoning in their recommendation.

Rubric 4: **Rubric 4 evaluates student responses to Question 4.**

Emerging	Developing	Proficient	Advanced
Student **incompletely and/or inaccurately** identifies the types of data collected and the data-collection devices used by volcanologists to predict volcanic eruptions. Student does not provide reasoning for how volcanologists know when to increase or decrease the warning level. **Student response is missing.**	Student **accurately and incompletely** identifies the types of data collected and the data-collection devices used by volcanologists to predict volcanic eruptions. Student provides **limited to no** reasoning for how volcanologists know when to increase or decrease the warning level.	Student **accurately and incompletely** identifies the types of data collected and the data-collection devices used by volcanologists to predict volcanic eruptions. Student provides **partial and accurate** reasoning for how volcanologists know when to increase or decrease the warning level.	Student **accurately** identifies the types of data collected and describes the data-collection devices used by volcanologists to predict volcanic eruptions. Student provides **thorough** cause-and-effect reasoning for how volcanologists know when to increase or decrease the warning level.