Biomes: Unit Rubric

CATEGORY	Distinguished	Proficient	Apprentice	Novice
Kinds of Biomes—What are the different biomes in the world?	Student can name all 9 of the world's biomes.	Student can name 7 or 8 of the world's biomes.	Student can name 4 to 6 of the world's biomes.	Student can name less than 4 of the world's biomes.
Characteristics —What are the meteorological and climatic characteristics of the different biomes?	Student can describe the meteorological and climatic characteristics of the group's biome in detail using statistics and scientific explanations.	Student can provide an adequate description of meteorological and climatic characteristics with some explanations and statistics, but may leave out some details.	Student can give a simple meteorological and climatic description of the group's biome with some statistics.	Student's description of meteorology and climate is incorrect or lacks understanding.
Geographic Location— Where do the biomes appear in the world?	Student can name specific locations of the group's biome throughout the globe.	Student can give general locations of the group's biome on more than one continent.	Student can identify one place where the group's biome appears.	Student is unclear about the location of the group's biome in the world.
Biological Relationships— How do different species of plants and animals interact?	Student can provide in-depth descriptions to compare and contrast the relationships among various organisms (including plant and animal) and explain how organisms benefit each other.	Student can provide adequate descriptions to compare and contrast the relationships among various organisms, but leaves out some details.	Student can provide simple descriptions of relationships among one set of organisms.	Student provides an incorrect or confused description of the relationships among organisms.
Animals —What kinds of animals live in the biome and how have they adapted to the environment?	Student can name several animals that live in the group's biome and provide detailed explanations of how the animals have adapted to the environment.	Student can name a couple of animals that live in the group's biome and give adequate explanations of how the animals have adapted to the environment, but some details are left out.	Student can name one animal from the group's biome or give a simplistic explanation of how the animals have adapted to the environment.	Student can not name any animals from the group's biome or give a correct explanation about how the animals have adapted to the environment.
Plants —What kinds of plants live in the biome and how have they adapted to the environment?	Student can name several plants that live in the group's biome and provide detailed explanations of how the plants have adapted to the environment.	Student can name a couple of plants that live in the group's biome and give adequate explanations of how the plants have adapted to the environment, but some details are left out.	Student can name one plant from the group's biome or give a simplistic explanation of how the plants have adapted to the environment.	Student can not name any plants from the group's biome or give an explanation of how the plants have adapted to the environment.

Designing Effective Projects

Human Impact—In what ways have humans affected biomes?	Student can provide detailed scientific explanations about human impact on the group's biome. The student describes and analyzes legitimate problems facing the biome and the reasons for the problems.	Student can provide adequate scientific explanation about human impact on the group's biome and provide some analysis of the problems, but some details are left out.	Student can give a simple explanation of human impact on the group's biome but can not provide analysis or reasons for any specific problems.	Student can not give an explanation of human impact or provide an example.
Solutions —What are possible scientific solutions to problems caused by humans?	Student can describe solutions to environmental problems in detail using scientific explanations from research. Student uses sound decision making skills to come up with possible scientific solutions.	Student can describe solutions to environmental problems using adequate scientific explanations, but some details are left out. Student uses decision making skills to come up with possible scientific solutions.	Student can describe simple solutions to environmental problems but can not provide scientific detail. Student uses some decision making skills to come up with possible scientific solutions but may need assistance.	Student can not describe any solutions to environmental problems. Student lacks decision making skills to come up with possible scientific solutions.
Subsequent Effect—What are the subsequent effects on human life?	Student can explain in detail the subsequent effect the group's solution has on human life with evidence to support the group's reasoning.	Student can explain the subsequent effect the group's solution has on human life with some evidence to support the group's reasoning.	Student can superficially describe the effect the group's solution has on human life.	Student can not provide examples of effects on human life.