Biome Research

Resources:

- Your Science Textbook Pages 728 - 735 Old Science Textbook Pages 474-480
- 2. Missouri Botanical Gardens: <u>http://www.mbgnet.net/</u>
- 3. Blue Planet Biomes: http://blueplanetbiomes.org/world_biomes.htm
- 4. Temperature and Rainfall information can be found:
 - In the old Science textbook pages 474-480
 - CRCT Coachbook page 126
- 5. BrainPOP <u>http://www.brainpop.com</u>

Watch the following videos: (Will be shown on the Promethean Board)

- Tundra
- Taiga
- Tropical Rainforest
- Savanna
- Desert
- 6. UnitedStreaming Videos These can be viewed during class on the Promethean board

Research Questions:

Tundra:

- 1. Describe how the tundra would look during the summer. Include plant life.
- 2. What prevents plants in the tundra from sending down deep roots?
- 3. Is the tundra treeless? Why?
- 4. Name two animals that can live in the tundra year-round. What adaptations allow them to live there during the winter?
- 5. Name four animals that migrate to another biome for the winter.
- 6. Why does the tundra have a thin layer of soil in the summer?
- 7. Why is the tundra found at the tops of mountains?

Taiga:

- 1. What adaptations do pine trees have to allow them to photosynthesis in the winter?
- 2. From which biome do the migratory animals come from during the winter?
- 3. Why can't deciduous trees survive in the taiga?
- 4. What is the soil like in the taiga?

Temperate Deciduous Forest:

- 1. Why is loosing its leaves an adaptation that helps deciduous trees survive during the winter?
- 2. Why is the soil of this forest nutrient-rich?
- 3. Explain the importance of decomposers in this biome.

Tropical Rainforest:

- 1. Why does the rainforest have poor soil?
- 2. Explain the three layers of the rainforest.
- 3. Why does the rainforest have such diverse plant and animal life?
- 4. Why do so many animals live in the canopy of the rainforest?
- 5. Why do the plants in the understory of the rainforest have large leaves?
- 6. Why doesn't the rainforest have seasons?
- 7. Explain the reason for the many vines in the rainforest?

Savanna:

- 1. Why does the savanna have trees but the grassland does not?
- 2. Describe the seasonal rain pattern of the savanna?
- 3. Which animals adapted to eat the foliage off the trees so they would not have to compete for the grass food source?
- 4. How is the elephant a keystone species for the savanna?
- 5. What is the role of the dung beetle in the savanna?
- 6. If the savanna received slightly less rain, what type of biome would it become?
- 7. If the savanna did not have periods of drought and wildfires, what type of biome would it become?

Grassland:

- 1. Why don't trees grow in the grassland?
- 2. What types of grazing animals were found in the grasslands before cattle ranching?
- 3. What types of grazing animals are now found in the grasslands?
- 4. If the grassland received slightly less rain, what type of biome would it be considered?

Desert:

- 1. How have animals adapted to the hot days and cold nights in the desert?
- 2. Why are there so few large animals in the desert?
- 3. How have plants adapted to the hot, dry climate of the desert?
- 4. Why aren't decomposers found in the desert?
- 5. What are succulent plants?
- 6. Why do cacti have needles?
- 7. How do the shallow, widespread roots of the cactus help it survive?
- 8. Why do some plants grow, drop seeds and then die in a matter of weeks in the desert?