

Name

Block

DATE

Succession Simulation

Part 1: Primary Succession: Click on the tab labeled "Primary Succession." Begin the simulation by clicking on the flashing red button on the "Temperature and Rainfall" slider. Observe what happens.

1. Describe what you think the land on the island is like BEFORE it is colonized by moss and lichen. Is it covered in soil?

2. List the series of **primary succession** events that occur on the island over time chronologically:
 - i.
 - ii.
 - iii.
 - iv.
 - v.

3. **Pioneer species** are the first organisms to colonize rocky land. Based on the simulation, what kinds of organisms are typical pioneer species?

4. Restart the simulation by moving the "Temperature and Rainfall" slider to "high." How does *increasing* the temperature and rainfall affect the rate of succession?

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5. A **climax community** is a stable community that occurs after succession has slowed down or temporarily stopped. What plants characterize this island's climax community?

Part 2: Secondary Succession: Click on the tab labeled "Primary Succession." Begin the simulation by clicking the play button. Observe what happens.

1. Describe the **disturbance** that triggers **secondary succession**.

2. How is the land at the beginning of **secondary succession** different than the land at the beginning of **primary succession**?

3. List the series of **secondary succession** events that occur on the island over time chronologically:

i. _

ii. _

iii. weeds, shrubs, and larger plants begin to grow

iv. _

4. How does the rate of secondary succession compare to the rate of primary succession? What is the cause for this difference?

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