

Way Kambas Food Web Model

Name

Date

Part I

In the space below, draw a model food web using species living in the Way Kambas National Park ecosystem. While you do not need to include all species from the food web, your food web should include:

- The sun
- Two decomposers
- Three producers
- Two consumers
- The Sumatran rhino

Use arrows to indicate how energy flows in the ecosystem. You can create your own symbols, colors, or other way of showing relationships between species. Include a key if you are using your own symbols so other people can understand your diagram. All species in your model food web should be connected to at least one other species listed.

PART II

Do not fill out this page until prompted by your teacher.

Answer the following questions in complete sentences.

1. Imagine that one of the consumer species in your food web experienced an increase in its population. Predict what impact this population increase would have on two other species within the ecosystem: one that is connected directly to the species by an arrow and one that is not. Use the claim-evidence-reasoning format to support your answer.

Species #1: Directly connected	Claim	Evidence	Reasoning

Species #2: Not directly connected	Claim	Evidence	Reasoning

2. Use the food web model you made in Part A to identify the smallest species.

What is the relationship between that species' survival and the survival of the Sumatran rhino? Explain your reasoning.

3. Two similar ecosystems experience a major flood event, decreasing the available habitat for organisms. One of the ecosystems has a high level of biodiversity and the other ecosystem has a lower level of biodiversity because of human activity. Compare and contrast how these ecosystems will be impacted by the disruption. Support your reasoning with evidence.