## **Preliminary Model Rubric**

Please note that in the preliminary rubric, we are not focusing exclusively on scientific accuracy but on the students' efforts to make sense of food webs.

Total	20 points
Food web is aesthetically pleasing and easy to follow	3 Points
Students include a secondary consumer in the food web.	2 Points
Students include a primary consumer in the food web.	2 Points
Students include a plant in the food web	2 Points
Students include the Sun in the food web	2 Points
Arrows depicting the flow of energy are shown in the food web.	3 Points
All organisms are labeled in the food web	3 Points
Students should include at least 10 different organisms in the food web.	3 Points

## **Final Model Rubric**

Please note that students are expected to demonstrate their understanding of scientific concepts in this model and will be graded based on the accuracy of their understanding as well as their ability to create a conceptual model.

Model includes at least 10 organisms as well as the Sun.	5 Points
Model includes producers and primary, secondary, and tertiary consumers	5 Points
Model includes a key or another form of labelling allowing the reader to know which organisms are producers, consumers, etc.	5 Points
Relative abundance of each organism is indicated and accurately reflects how the loss of energy results in there being fewer organisms at higher trophic levels	5 Points
Model uses arrows to demonstrate the flow of energy and energy loss is shown at each trophic level	5 Points
Model includes a written explanation for how energy flows through a food web	10 Points
The written explanation addresses how energy enters the food web through photosynthesis	5 Points
The written explanation accurately explains how consumers obtain energy	5 Points
The written explanation explains how energy is lost at each trophic level	5 Points
The written explanation ties back into the driving question (Why isn't every animal a carnivore?) and provides a logical answer to that question.	5 Points
Model is aesthetically pleasing and easy to follow	5 Points
Total Points	60 Points