## Trophic Cascades Homework

Name: Class Period: Date:

Problem 1: Draw a diagram explaining a trophic cascade in a habitat with grass, deer, and pumas. Make sure to include direct effects (with filled in lines) and indirect effects (with dotted lines) in your diagram.

## Problem 2: Humans can be top carnivores too!

Humans can hunt or scare away carnivores. Using the example from the reading of an ecosystem with humans, pumas (also called cougars), deer, and plants, draw a diagram of the trophic cascade at work in Zion National Park. (Hint: In this ecosystem, we have 4 trophic levels!)

Reading: Ripple, W. J. and R. L. Beschta. 2006. Linking a cougar decline, trophic cascade, and catastrophic regime shift in Zion National Park. Biological Conservation 133:397-408.

Diagram available from: http://www.cof.orst.edu/leopold/cougars/OpenHouseposter.pdf