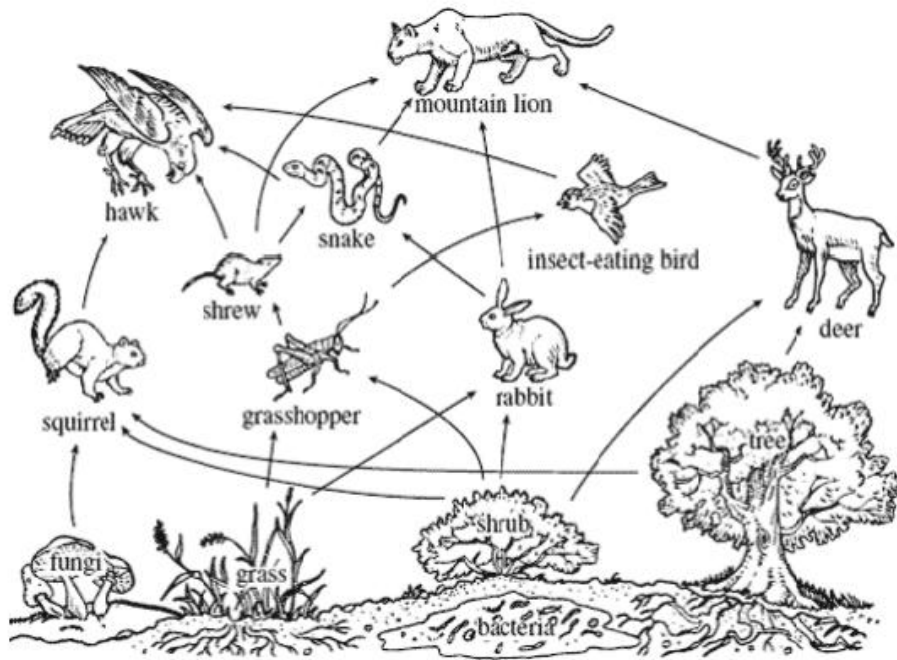


Patterns of Interactions Predictions

Food Web



Directions: Answer the following questions using the food web above and the jot chart you created previously.

1. What pattern of interaction would you expect between the tree, shrub, and grass in the ecosystem? Explain your answer.

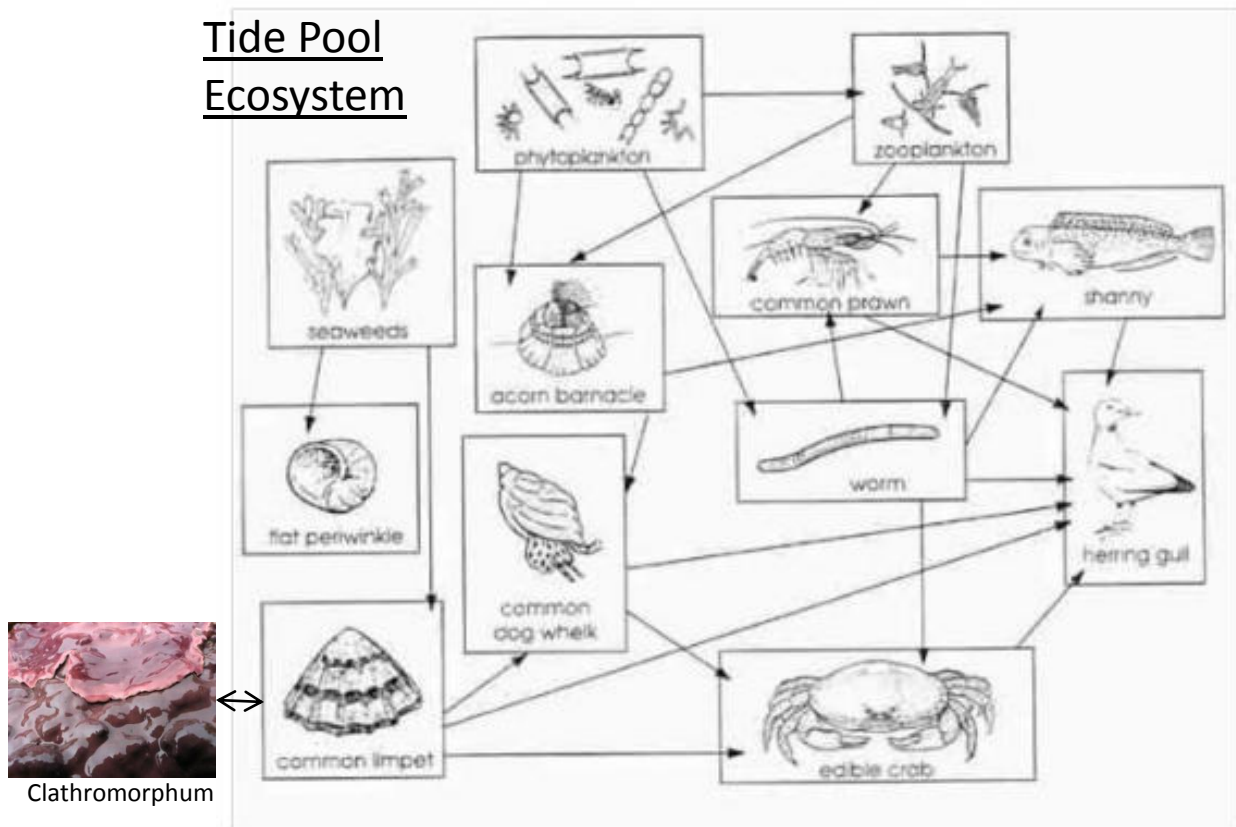
2. What pattern of interaction exists between the mountain lion and other organisms on the food web? Explain your answer.

3. One year there was an outbreak of *Mermis nigrescens* (grasshopper nematode) in the ecosystem. This roundworm develops inside the grasshopper's body as it feasts on its blood, eventually leading to the grasshopper's death. What pattern of interaction exists between the grasshopper and the grasshopper nematode?

4. Due to the outbreak of the grasshopper nematode, the grasshopper population greatly decreased. How would you expect this to affect the shrew, snake, and hawk populations? What patterns of interaction may develop between these organisms?

Patterns of Interactions Predictions

Tide Pool Ecosystem



Directions: Answer the following questions using the food web above and the jot chart you created previously.

1. Limpets feed off of Clathromorphum, a type of coralline crust algae, which cleans the surface of the algae. Without the limpet, different types of bacteria would take over its surface. What pattern of interaction exists between the two organisms? Explain your answer.
2. If the population of the common dog whelk suddenly increased, what would you expect to happen to the limpet population? How would this affect the relationship between the limpet and the Clathromorphum?
3. The flat periwinkle is a type of snail that harmlessly attaches itself to plants, like seaweed, in a tide pool, so it doesn't get washed out to sea. What pattern of interaction exists between the periwinkle and the seaweed? Explain your answer.
4. After a cold, dark winter, much of the seaweed in the tide pool dies. How would this affect the flat periwinkle? Explain your answer.