ANALYSIS QUESTIONS

Name: _____

Part 1- Wolves and Moose on Isle Royale

1. Describe the pattern the graph shows in the interaction between wolves and moose on Isle Royale, Michigan.

   _____

   _____

   a. What do you think might cause this pattern? _____

   b. What other biotic factors could affect the size of moose population?

      _____

   c. What abiotic factors could affect the size of the moose population?

      _____

2. Looking at Figure 1, what do you predict will happen to the size of the wolf and moose populations over the next 10 years? Explain your reasoning.

   _____

   _____

   _____

   _____

ANALYSIS QUESTIONS

Name: _____

Part -2 Rainfall and Fawn Survival

1. Describe the pattern in the relationship between Sonoran pronghorn antelope and rainfall. _____

   _____

   a. What do you think might cause this pattern?

      _____

   b. What other abiotic factors could affect the survival rate of fawns?

      _____

   c. What biotic factors could affect the survival rate of fawns?

      _____

2. What do you predict would happen to the survival rate of fawns if rainfall levels stayed high? Explain your reasoning.

   _____

   _____

   _____

BONUS:

Pigeons are native to Europe, Asia, and northern Africa. They originally nested on cliffs and ledges. Their diet included seeds, grains, and some fruit and insects. Their predators included large birds, such as hawks, and mammals, such as raccoons and foxes. Pigeons are one of the few animals that are very successful in urban ecosystems with dense human populations.

Why are pigeons successful in urban ecosystems? Use what you know about biotic and abiotic factors in your answer.