# Chapter 31;Units 1-3

#### Learning Objectives:

* Biology 2 (II.7): Compare the structure of nutrient procurement and processing systems in plants and animals.
* Biology 2 (V.1): Explain how regulatory mechanisms at the level of the whole organism ensure balance in living systems that interact continuously with their environments; compare regulatory mechanisms within and across species.

**Project 1:**

Complete the end of the chapter “Review Questions”. Make sure to answer each question thoroughly and include page numbers from the text where the answers can be found. Be prepared to discuss your answers in a group setting during class.

**Project 2:**

Complete the end of the chapter “Critical Thinking Questions” according to your group number. You will be sharing your responses with members from the other groups during class. (This is a modified “Jigsaw” method. To use this “Jigsaw” have everyone meet in their groups for a specified amount of time. While they are discussing their responses/ideas separate everyone into new groups so that each new group has a representative from the original group. Have the new groups meet for a specified amount of time to share their responses/ideas. This way each person holds a piece of the overall puzzle.)

Group 1: 16-18

Group 2: 19-21

Group 3: 22-24

**Project 3:**

Divide the class into small groups. Assign each group a different region of the United States (California coast, Rocky Mountains, Northwest Ohio, etc.). Every group will perform research to learn about their regions soil quality and characteristics. They will use their research to create a soil guide on Microsoft Word. They can share their guides in class or through a program such as Google Docs.

**Project 4:**

Create a diagram or table that compares the soils found in tropical rainforests and in agricultural areas of temperate grasslands (prairies). Then answer the following questions…

1. How is each soil able to support plant life?
2. Why are the soils of tropical rainforests and temperate grasslands so different?
3. Why are the soils of temperate grasslands better suited for agriculture?
4. What benefits would crop rotation provide in terms of soil quality?

**Project 5:**

Create a list of parasitic, epiphytic, and symbiotic plants found in Ohio (must have at least five plants total). Include a full description of each plant (location, characteristics, unique attributes, etc.) within your list.