

**Chapter
11**

**Economic and Spatial
Impacts of Agriculture**

**Rural and Agricultural
Geography 2**

Note: all of the following information in addition to your reading is important.

How Did Agriculture Change With Industrialization?

* The following can be answered using both the text and video.

- Define: Second Agricultural Revolution - _____

- Briefly describe the impact the Little Ice Age had on food production - _____

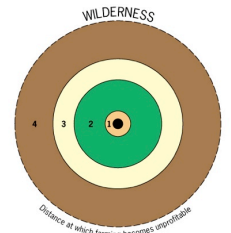
- Briefly describe the open field system that was dominant in Europe during the Medieval Warm Period - _____

- Briefly describe how each of the following features of the Second Agricultural Revolution contributed to greater food production:

Enclosure Movement	
Crop rotation	
Seed drill	
McCormack Reaper	
Livestock breeding	
Railroad	
ONE other innovation	

Understanding the Spatial Layout of Agriculture

- _____ (1783-1850) witnessed the 2nd Agr. Rev. firsthand (in Germany); his model was the first effort to analyze the _____ character of economic activity.
- Discuss the assumptions made for the model (to simplify the real world):



- Terrain - _____
- Transportation - _____
- Natural conditions - _____
- Human conditions - _____

- Four _____ rings formed around the town (or city); briefly explain the location of the commodities (or crops) that dominated each ring:
 - Ring 1 - _____
 - Ring 2 - _____
 - Ring 3 - _____
 - Ring 4 - _____

- Briefly discuss the validity of the “Isolated State” in the real world - _____

The Third Agricultural Revolution

- Define: Third Agricultural Revolution (a.k.a. “Green Revolution”) - _____

- Discuss how biotechnology (through hybridization and development of HYVs) has increased crop yields - _____

- Discuss how chemical farming has increased crop yields - _____

- Discuss how other technologies (e.g., irrigation, mechanization) have increased crop yields - _____

- Discuss the methods and impact of the Green Revolution in Mexico - _____

- Discuss the methods and impact of the Green Revolution in India - _____

- Discuss why the Green Revolution has had only a minimal impact in Africa – _____

- List a few ways in which the Green Revolution has been successful, and can continue to be a success - _____

- List a few ways in which the Green Revolution has been a failure, and may limit its future success - _____

- Define: biodiversity, and describe the impact the Green Revolution has had on biodiversity - _____

- Define: Gene (Biotechnology) Revolution (and genetically modified organisms) – _____

- Discuss TWO positives of GMOs - _____

- Discuss TWO negatives of GMOs - _____