The following information corresponds to Chapter 11 in your textbook (341-348). Fill in the blanks to complete the definition or sentence. Note: All of the following information in addition to your reading is important.

**The Third Agricultural Revolution**
- The Third Agricultural Revolution is also known as the ____________, and began in the 1930s & 40s when American agriculturists manipulated seed varieties of ____ to increase crop yields in Mexico.
- It has not just been the production of higher yielding _____ (e.g. IR36 = _____) - also development of chemical fertilizers, insecticides, irrigation, machinery, and hybridization (e.g. more disease-resistant).
- _______ was no longer importing corn by 1960; _______ was self-sufficient in wheat by the 1980s; and _______ saw a 2/3 increase in rice production between 1970 and 1995...
- Despite these successes, the Green Revolution has had only a marginal impact in much of ________: Why?
- An entire field of ______________ has sprung up in conjunction with the Third Agricultural Revolution, focused on the development of genetically engineered crops (GE) or __________ _______ (GMOs); these can be found in ___ percent of all processed food in the US.
- Conditions for the Green Revolution to be a success within a region include – surplus ________, ______ stability, ______ (not subsistence) farmers, transportation and __________, a _______ economy (as opposed to a command (communist) economy), _______ acceptance, and ________,… Countries like China, India, and Mexico have benefited perhaps more than other regions (e.g. Sub-Saharan Africa).
- Conditions that limit success include – a decline in _____ quality, _______ (e.g. water), increased _____ of fuel & fertilizer, lack of ________ (e.g. women unable to receive credit), crushing _____ (individual & national), _______ factors (erosion, desertification), loss of ________ (fewer choices),…

**Patterns of Settlement and Land Use**
- The size and structure of rural regions depend on space, environment, and social norms (as well as laws).
- __________ - system in which all land passes to the eldest son; the norm in northern Europe (and in their colonized areas – Americas, South Afr., Australia,…)
- __________ system – delineates property lines;
- Rectangular survey system (adopted by the U.S.); the __________ - __________ system - designed to facilitate the even dispersal of settlers; the basic unit is the 1 square mile section; used across the Midwest (Northwest Ordinance - 1787) & also in Canada.
- The __________ __________ __________ approach uses natural features to demarcate irregular parcels of land; used along the eastern seaboard (U.S. & Can)
- The __________ __________ system divided land into narrow parcels stretching back from rivers, roads, or canals; this approach was common in Quebec, and French America (parts of Louisiana & Texas).

* The map on page 345 in your text is particularly useful in identifying the dominant land survey patterns in the United States.
Housing and Landscape

- settlement - houses lie quite far apart; the land is intensely cultivated by machine rather than by hand. Give one example:

- settlement - houses are grouped together in tiny clusters (hamlets) or larger clusters (villages); this is by far the most prevalent rural residential pattern in agricultural areas.

- Early humans lived in small bands; as the communal structure became more complicated and people performed different tasks, some buildings (e.g. chief’s residence was larger, or more imposing than the others; buildings for food storage and livestock shelter became necessary).

- Human communities existed in widely separated areas as early as _______ years ago; one of the most fascinating adaptations was the invention of the _______ by the Inuit people in the frozen northlands – using the very materials they were trying to protect themselves from.

Villages

- From individual dwellings to settlements: ______ of the world lives in villages and rural areas.

- The smallest rural settlements are _______; often defined in terms of its ____________ (a hamlet offers very few services (gas station, store, etc...), whereas a village (the other rural settlement form) may offer several dozen services).

- At what point does a village become a town (minimum population)?

  Canada - United States - India - Japan -

- Traditionally, the majority of the people in a village are involved in _______ activities, and are closely connected to the land (most of their livelihoods depend on the cultivation of nearby _______).

  A) _______ - houses in Japanese villages are tightly packed (need to allocate every available foot of land for farming); Western European villages built on dikes & levees (strassendorfs) to protect from flooding.

  B) _______ - the village may have begun as a hamlet, and developed by accretion.

  C) _______ - (rundling) European – similar to East Afr. circular village (w/ a central cattle corral).

  D) _______ - farm villages fortified for protection

  E) _______ - most modern villages are planned this way; Spanish invaders in Middle America laid out their villages in this manner centuries ago.