Unit 5 Study Guide

Chapter 10

1. Know **tragedy of the commons** and be able to identify examples.
2. What are **externalities**? What are some **positive** ones? Some **negative** ones?
3. What is **maximum sustainable yield**? How can it exceeded?
4. Familiarize yourself with the International and National **public land designations**.
5. Where is logging, road construction, and mining allowed? Where are they banned?
6. What are **rangelands**?
7. What's the biggest concern with rangelands?
8. What are the **consequences** of removing a forest?
9. What type of succession would be associated with deforestation?
10. Compare and contrast **clear-cutting** and **selective cutting**.
11. What are the positives and negatives of a **tree plantation**?
12. What are the **ecological benefits** of fire?
13. What is a key component of good **fire management**?
14. What **specific type of fire** are they trying to avoid?
15. What are some of the **biggest problems** facing National Parks?
16. What's the difference between a **wildlife refuge** and a **wilderness area**?
17. What is **NEPA**?
18. What's an **EIS**?
19. What are **suburbs**? **Exurbs**?
20. Where do most people in the US live now?
21. What is **urban sprawl**? What are the main **causes**?
22. Be able to follow the **positive feedback loops** of urban sprawl (**see diagrams in Module 30**)
23. Familiarize yourself with the principles of **smart growth**.

Chapter 11

24. Know the difference between **undernutrition** and **malnutrition**.
25. With a growing population requiring more and more food, be able to identify **possible strategies** for feeding more people.
26. From what **sources** does the world receive most of its calories?
27. Be familiar with the **positives** and **negatives** of **meat production**.
28. What is **energy subsidy**?
29. How does energy subsidy relate to **thermodynamics**?
30. What are the **external costs** of modern agriculture?
31. Know the positives and negatives of the **green revolution** and **industrial agriculture**.
32. What are some potential issues with **overwatering** crops?
33. What's the best way to solve the problem of **salinization**?
34. Know the difference between **organic** and **inorganic fertilizers**.
35. What are **pesticides**?
36. Know the **positives** and **negatives** of pesticides.
37. What is the **ideal pesticide**?
38. What is the **pesticide treadmill**? What is it a constant example of?
39. **Genetic engineering** has tremendous potential, but some serious scary consequences – what are they?
40. What are **CAFOs**?
41. Why are fisheries collapsing?

42. What is **bycatch**?
43. Be familiar with the common **commercial fishing** techniques.
44. Which of these is the most destructive?
45. What is the **alternative** to industrial agriculture?
46. Know several of the techniques used in **sustainable agriculture**.
47. What is **no-till agriculture**? What's the goal?
48. What's **IPM**? What's the ultimate goal?
49. What are some advantages and disadvantages of **aquaculture**?
50. Last one – remember that lab you designed? Be able to do it again and analyze results of experiments.

Now go quiz yourself with the questions on pages **353-355** and **386-391**!