1. Identify 2 density-dependent **and** 2 density-independent factors that influence a population’s growth. Describe the difference between the two factors.
2. Differentiate between a K-selected and r-selected species. Include 3+ characteristics for each type.
3. Discuss what factors influence a population’s carrying capacity.

1. Explain factors that may allow the **human** population to exceed carrying capacity.
2. Explain how an age structure influences the population growth rate.
3. Explain how a country’s fertility rate and net migration rate determine the population’s growth.
4. New Zealand has a population of 4.3 million people, a TFR of 2.1, and a net migration rate of 2 per 1000. How many people will New Zealand gain next year as a result of immigration? If the TFR stays the same for the next century, and the net migration rate stays the same as well, when will the population of New Zealand double? SHOW YOUR WORK.
5. Describe the theory of demographic transition.
6. Discuss the influence that education has on demographic transitions.
7. Identify social, economic, and environmental factors that have contributed to decreasing growth rates in many countries.
8. Explain the relationship between population size, economic development, and resource consumption.
9. Discuss the costs and benefits associated with living in an urban area and a rural area.
10. Identify the causes and consequences of urban sprawl.
11. Describe how a thermal inversion may occur in an urban area.
12. Describe the functions of the NPS, USFS, USFWS, and BLM. Explain how the roles of each of these organizations differ.
13. Differentiate between clear-cutting and selective-harvesting. Compare their respective environmental impacts.
14. Discuss the significance of the National Wilderness Area designation.
15. Discuss reasons for food insecurity, malnutrition, undernutrition, and obesity.
16. Identify 3 factors leading to the Green Revolution.
17. Identify the costs and benefits associated with the use of synthetic pesticides.
18. Describe the process of producing a GMO. Identify the advantages and disadvantages associated with using GMO’s.
19. Describe 3+ approaches included in sustainable agriculture and explain what benefits they offer in comparison to conventional agricultural techniques.
20. Describe 3+ ways in which modern agribusiness produces meat and fish.
21. Discuss the costs and benefits associated with aquaculture (fish farming).
22. Explain the consequences of surface mining vs. subsurface mining. Explain how mining legislation attempts to minimize these impacts.