

Name:
Class:

Population Ecology Review- Academic

1. A population's size can be determined by subtracting the births and _____ from the _____ and emigration.
2. When people move in to a country it is called _____ and when they move out it is called _____.
3. If the births are _____ than the deaths, the population will grow but if they are equal there will be _____ growth and if deaths are greater there will be _____ growth.
4. Steady growth or _____ growth is almost never something that happens to populations. This steady growth looks like an increasing straight _____ and is seen like when money earns interest in a bank.
5. Populations on the other hand usually grow _____ as the number of reproductive individuals in the population increases. When graphed it has a _____ shape.
6. This ever increasing growth actually occurs for short periods when resources are _____ but it cannot be sustained.
7. Eventually _____ factors slow a population's growth and it will level out at its maximum size called the _____.
8. The graph will instead have an _____ shape and the growth is called _____ because it slowed and reached its carrying capacity.
9. As a population's size increases some limiting factors have a greater and greater limiting affect and are called density-_____. Examples of which would be _____ and _____.
10. Other limits affect a population regardless of its size/density and they are thus called density-_____. Examples of which would be _____ and _____.
11. The abiotic factors tend to be density-_____ and the biotic tend to be density-_____.
12. Predator and _____ populations exhibit a special kind of limit on each other as the number of prey increase the number of predators will also increase but with a _____ time as they have a delayed response. As the amount of prey increases there is more _____ as they are easier to catch. As the amount of lynx increases there is more _____ between lynx for the prey as prey numbers are decreased.
13. The study of changes to populations is called _____.
14. One way to study these changes is to graph an _____ diagram that shows the percentage of _____-reproductive, reproductive and _____-reproductive percentages of a population.
15. If it is shaped like a box at the bottom with the youth and adult percentages the same the growth is _____, if it is shaped like a steep triangle the growth is _____ or a smaller triangle the growth is _____. If shaped like a top the population growth is _____.
16. The human population has been growing _____ (you can tell by our J shape graph) since the Industrial Revolution. It took over a thousand years to reach 1 billion people but we have increased to 7.5 billion in the last 200 years!
17. When population become wealthy they go through a _____ transition as the _____ rate drops followed by a lagging drop in the _____ rate (which has resulted in a surplus of births!).

18. The death rate drops as a country gains wealth due to increases in _____, nutrition _____, and _____.
19. In turn, the birth rate will eventually drop as children are no longer needed for _____ instead they become a burden to be _____ and fed. Another way to drop the birth rate for a country is to increase education especially for _____ who will then wait to start a family after they have started their careers.
20. If a country has an average of _____ kids per couple, it will see zero growth and be stable but if it has _____ kids per couple there will be _____ growth. For a population to shrink (negative growth) there would be an average of _____ kids per family.
21. Global problems of increased energy use leading to pollution and climate change, loss of habitat and extinctions, food shortages leading to famine and competition over resources leading to wars can all be prevented by decreasing the worlds human _____ which occurs as individual _____ (like 1 human) decide to reduce their _____ rate because it isn't ethical to increase the _____ rate and we can't _____ off the planet!