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| **Lesson 1** | |
| \_\_\_\_ \_\_\_\_ 1. Population explosion means \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | The sudden large increase in a population’s size |
| 2. Mankind’s population jumped from 1 billion to 3 billion in \_\_\_\_\_\_ years | 100 |
| 3. What are three ways that the Industrial Revolution increased our population? | 1) Less children dying  2) increased food availability  3) advances in medical technology |
| 4. \_\_\_\_\_\_\_\_\_\_\_\_ is the largest number of individuals of a species that the Earth can support for a long period of time | Carrying capacity |
| 5. What would happen if the human population exceeds our carrying capacity? | We would experience a population crash |
| **Lesson 2** | |
| 6. Name 3 consequences of reduced vegetation | 1) less oxygen, more carbon dioxide  2) less food available  3) less anchoring for soil, leading to loss of topsoil by wind erosion |
| 7. 30 to 50 percent of organisms live in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | The Rainforest |
| 8. Know the Nitrogen Cycle, and what happens if there is too much nitrogen in an ecosystem |  |
| 9. \_\_\_\_\_\_\_\_\_\_\_ leads to habitat fragmentation, loss of farmland, and an increase in runoff. | Urban Sprawl |
| 10. What is composting? | When you recycle decomposing material as fertilizer for the soil instead of using artificial, nitrogen-rich fertilizers |
| **Lesson 3** | |
| 11. \_\_\_\_\_\_% of water used in the United States is used for public supply | 11% |
| 12. List three ways you can reduce water usage | 1) take shorter showers  2) switch off your faucet when you brush your teeth  3) use more water-efficient toilets |
| 13. Circle the following that can be poured down the drain:  Battery acid, white vinegar, bacon grease, jam, flushable wipes | White vinegar, jam |
| 14. What is compost, and how can it help reduce water pollution? | Recycled decomposing plant matter that is used as a fertilizer. Less nitrogen than artificial fertilizers, which means less runoff |
| 15. Runoff from farms, construction, or mining is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ pollution | Nonpoint-source |
| 16. Most of the water pollution comes from \_\_\_\_\_\_\_\_\_\_\_\_\_ pollution | Nonpoint-source |
| 17. Give two examples of point-source pollution | Oil spills, industrial waste dumping by factories |
| 18. The pollution in Lake Erie improved because of cooperation from what two countries? | USA and Canada |
| **Lesson 4** | |
| 19. What is the level of the Air Quality Index where you should avoid prolonged exposure outside? | Between 201 to 300 |
| 20. \_\_\_\_\_\_\_\_\_\_\_\_ are what has eaten a hole in the Ozone layer | Chlorofluorocarbons (CFC’s) |
| 21. List three sources that release carbon dioxide into the atmosphere | 1) burning fossil fuels  2) burning trees  3) exhaling carbon dioxide during respiration |
| 22. What is photochemical smog? | Nitrogen and Carbon compounds that interact with light and form, among other things, ozone at the surface of the Earth. |
| 23. What law was passed in 1970 that sets limits on the amount of pollution released in the air? | The Clean Air Act |
| 24. How is acid precipitation formed? | Sulfur dioxide from factories combine with water vapor in the air to form sulfuric acid that falls down with precipitation |