**APES Review Worksheet #2**

1. List three consequences of global warming.

1)

2)

3)

1. List three things you could do to decrease your contribution to global warming.

1)

2)

3)

1. List four greenhouse gases.

Altitude

(km)

Temperature (°C)

1) 3)

2) 4)

1. The molecular formula of ozone is \_\_\_\_\_\_\_\_.
2. Use the axes to the right for the following:
   1. Draw a line representing the Earth’s atmosphere.
   2. Label each layer of the Earth’s atmosphere and identify where the greenhouse effect occurs and the ozone layer is situated.
3. The chemicals that deplete the ozone layer are \_\_\_\_\_\_\_\_\_\_.
4. In the box below, write out a series of chemical equations that illustrate the destruction of the ozone in the ozone layer.
5. Provide examples of three biotic components of an ecosystem.

1) 2) 3)

1. Provide examples of three abiotic components of an ecosystem.

1) 2) 3)

1. Complete the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Trait | Carbon | Nitrogen | Phosphorus | Water |
| importance to life |  |  |  |  |
| largest reservoir |  |  |  |  |
| method of transport |  |  |  |  |
| cycle length (long/short) |  |  |  |  |

1. Write the balanced chemical equation for photosynthesis in the box on the right.

Photosynthesis:

1. The approximate age of the Earth is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ years.
2. Write the balanced chemical equation for cellular respiration in the box on the right.

Cellular Respiration:

1. Match the following:
   1. generalist species Zebra mussel
   2. specialist species Galapagos tortoise
   3. invasive species American Alligator
   4. keystone species Tiger salamander
   5. indicator species Norway rat
   6. endemic Species Giant Panda
2. Define the term biodiversity.

1. Humans have engaged in agriculture for approximately \_\_\_\_\_\_\_\_\_\_\_\_ years.
2. Define biome

1. A man-made product is also known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Sketch and/or label the following on the map of the world below:
   1. the equator
   2. the tropic of Cancer and the tropic of Capricorn
   3. the Mid-Atlantic Ridge
   4. the location of suppressed upwelling characteristic of the occurrence of El Niño
   5. the location of Diamond Bar, China, India, Ethiopia, Brazil, and Bangladesh
3. Complete the following table:

|  |  |  |  |
| --- | --- | --- | --- |
| Type of Biome | Typical Location | Typical Climate | Adaptations for survival |
| Tropical Rain Forest |  |  |  |
| Temperate Deciduous Forest |  |  |  |
| Taiga (Boreal) Forest |  |  |  |
| Tropical Grasslands (Savanna) |  |  |  |
| Temperate Grassland (Prairie) |  |  |  |
| Tundra (cold grassland) |  |  |  |
| Desert |  |  |  |

1. Describe the circumstances that will result in cultural eutrophication.

1. Explain how increasing the concentration of carbon dioxide in the atmosphere leads to ocean acidification.