**Abiotic Cyles**

* The Carbon Cycle
1. Free \_\_\_\_\_\_\_ is found in the atmosphere
2. \_\_\_\_\_\_\_\_\_\_\_ take in \_\_\_\_\_ in order to perform \_\_\_\_\_\_\_\_\_\_\_\_\_\_. They release \_\_\_\_\_\_\_
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ breathe in \_\_\_\_\_ and give off \_\_\_\_\_\_ as exhaled waste during \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ release carbon into the soil as they \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (like oil) are \_\_\_\_\_\_\_\_\_\_\_\_\_\_ from the carbon of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Carbon in the soil is used by roots of plants. It is also \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into the \_\_\_\_\_\_\_\_\_\_\_ and used by \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ during photosynthesis.

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**2**

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**5**

**1**

**2**

* Nitrogen Cycle
1. Nitrogen is found in the atmosphere in the form of \_\_\_\_\_\_\_\_
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_– bacteria “fix” nitrogen so it can be used by plants
3. Nitrates (NO3-) are converted to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**(NH4+)** by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (biological chemicals that help reactions happen) in a process called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Ammonium is taken in by plants through a process called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (when nitrogen fixing is not possible) to help them grow
5. Dead organisms release ammonia back into the soil. This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Fungus (mushrooms) help with this process.
6. Ammonia mixes with the oxygen in the soil and creates \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **(NO2-)** and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**(NO3-**). This is a problem because the negative charge doesn’t let the nitrogen mix with the soil.
7. Enzymes found in animal waste mix with the Nitrites and Nitrates to convert them back to N2 which is released into the atmosphere. This is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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