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Phosphorus and Nitrogen Cycles

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| **Across****1.** What is the only biological enzyme that can break Nitrogens triple bond? **4.** What process involves splitting nitrogen apart into a form that plants can utilize? **7.** What percent of the atmosphere does Nitrogen make up? **9.** Fertilizers can have a \_\_\_\_\_\_\_ impact on ecosystems when large amounts of nitrogen and phosphorus are introduced.**11.** Unlike many elements contained in the air, where is phosphorus commonly found? **12.** What type of bacteria uses the enzyme nitrate reductase to metabolize nitrogen oxides and transform them back into nitrogen gas? | **Down****2.** What type of bacteria takes ammonia and can convert it into nitrates and nitrites? **3.** When water erodes phosphorus containing rocks, phosphates, are \_\_\_\_\_\_\_\_\_\_ into the water.**5.** What man made invention requires phosphorus and nitrogen as part of its ingredients? **6.** How long can a single atom of phosphorus be caught in a biological cycle for?**8.** Are the dissolved phosphates in water able to be assimilated by plants? **10.** What form of nitrogen is used by plants?  |