

Nitrogen Cycle Worksheet

1. What is the largest reservoir that contains about 78% of all N_2 ?
 - (A) Bacteria
 - (B) Atmosphere
 - (C) Plants
 - (D) Soil
2. The process where N_2 molecules in the air break apart and combine with other atoms to form ammonia.
 - (A) Ammonification
 - (B) Assimilation
 - (C) Denitrification
 - (D) Nitrification
 - (E) Nitrogen Fixation
3. This type of nitrogen fixation occurs when energy from lightning breaks N_2 molecules apart and they combine with oxygen forming N_2O .
 - (A) Atmospheric Fixation
 - (B) Biological Fixation
 - (C) Industrial Fixation
4. Industrial fixation is the process of combining N_2 with H_2 to form
 - (A) ammonia.
 - (B) nitrates.
 - (C) nitrites.
 - (D) proteins.
5. Returning nitrogen to the atmosphere by bacteria living deep in swampy sediments is the process of
 - (A) ammonification
 - (B) assimilation
 - (C) denitrification
 - (D) nitrification
 - (E) nitrogen fixation

6. This form of nitrogen fixation is where most nitrogen “fixing” takes place.
- (A) Atmospheric Fixation
 - (B) Biological Fixation
 - (C) Industrial Fixation
7. Nitrogen fixing by bacteria living in root nodules of plants is called a/an _____ relationship.
- (A) asexual
 - (B) cyclical
 - (C) symbiotic
 - (D) fraternal
8. This process in the nitrogen cycle involves bacteria in the ground combining ammonia with oxygen to form nitrates.
- (A) ammonification
 - (B) assimilation
 - (C) denitrification
 - (D) nitrification
 - (E) nitrogen fixation
9. Suggest a way that nitrogen from a farmer’s field could end up in a lake.
10. Some of the fertilizers that are applied to fields may be lost to the air or water. This is wasteful and expensive for farmers. Suggest a change in technology or farming practices that could reduce the loss.