1. The conversion of atmospheric nitrogen to nitrates by bacteria is called \_\_\_\_\_\_\_\_\_\_.

**Nitrogen fixation**

1. Name an important group of biomolecules that plants make from nitrates.

**Proteins**

1. Farmers add nitrates as fertilizers to the soil. They are advised not to spread fertilizers if heavy rain is forecast. Why do you think they are given this warning?

**Fertiliser may be washed off the land / eutrophication**

1. What is the function of the nitrogen cycle?

**To make (nitrogen) available / for use by organisms**

1. What is meant by nitrogen fixation?

**The conversion of nitrogen into nitrates**

1. What is meant by nitrification?

**The process of converting ammonia into nitrites and/or nitrites to nitrates**

1. What is meant by nitrogen fixation?

**The conversion of nitrogen into nitrates**

1. Name a group of organisms involved in nitrogen fixation.

**Bacteria / monera / Lichens/ Clover / Legumes**

1. Decomposition is essential for the addition of nutrients to the soil. Explain the underlined term.

**Decaying / rotting**

1. Name two groups of micro-organisms in the soil which are responsible for decomposition.

**Bacteria and Fungi**

1. Why are elements recycled in nature?

**Limited supply or words to that affect or reused**

1. Name one group of organisms responsible for process of decomposition in nature.

**e.g. bacteria** or **fungi** or **microorganisms** or **earthworms** or **insects**

1. The term used to describe micro-organisms and other organisms that return nutrients to the environment by decay is …

**Decomposers**

1. Explain the term ectoparasite.

**Organism living on host (or explained) / causing damage**

1. Draw a large labelled diagram to illustrate the main features of the nitrogen cycle.

**Nitrogen gas to usable compounds / Plant protein to animal protein / Excretion releasing N compounds / Death and decomposition / Dead matter to Ammonium / Ammonium to nitrite / Nitrite to nitrate / Nitrates to plant protein / Nitrogen compounds to nitrogen gas / One example of bacterial involvement / Role of lightning**

1. Outline two biological similarities between the nitrogen cycle and the carbon cycle.

**Fixation (or explained) / bacteria (or micro-organisms) involved / death and decay /nutrition (or described) / excretion**

1. Describe the role of Plants in the Nitrogen Cycle and in the Carbon Cycle.

**Absorb nitrates / synthesise protein / absorb CO2 / synthesise carbohydrate (or photsynthesise) / respire / die**