PROBLEM SOLVING ACTIVITY: FROM DINOSAURS TO YOU

BACKGROUND: All food ultimately comes from green plants. Although all organisms can transform one type of food into another, only green plants can harness sunlight and use it to convert carbon dioxide and water into the sugars that directly or indirectly fuel all living things, from the largest dinosaurs to the smallest insect. The structural elements of plants -carbon, hydrogen and oxygen- are derived from air and water. Other plant nutrients like nitrogen, are taken from the soil and energy is supplied by the Sun.

The flow of these nutrients is fairly simple. Unused portions of plants band animal wastes are returned to the soil. These are broken down by bacteria to provide the nutrients needed for the growth of new plants. Properly maintained, this natural cycle could continue for millions of years without seriously depleting the soil.

Task: It has been theorized that the nitrogen that is in the food you eat today may have been part of a dinosaur. Draw and label a diagram that shows how the nitrogen could have gotten from the dinosaur to you over millions of years.