Plant project : A farm field in Greenville WI

Poor reasoning: These are fibrous roots. They help keep the dirt together. Makes the grass stable.

( Reasons given are basic and include irrelevant information as to why it is important to the plant. The vocabulary is not scientific.)

Developing reasoning: I have chosen fibrous roots because in my environment I need to be able to hold onto the soil to not blow away. These roots suck up water fast.

(More than one correct reason for that choice in root type, but the connection to the environment is not made. Basic vocabulary)

Proficient reasoning: This plant has fibrous roots in order to be anchored into the ground by multiple root branches which will increase the stability. Fibrous roots also will allow my plant to take in water quickly. Fibrous roots also do not require a lot of energy to grow.

(Two or more accurate reasons are listed and explained as to why this is a good choice for this environment. Most of the explanations are scientific.)

Advanced reasoning: With the soil being high in nutrients, my plant will need to have roots underground. Secondly the soil quality will be adequate to anchor with branching fibrous roots, and the fibrous roots will provide adequate stability. Due to the regular occurrence of rain, fibrous roots will be excellent at absorbing the water quickly.

(Two or more accurate reasons for choice are listed and explained, thinking about how this would work in the environment is evident. Most or all of the explanations are scientific.)