Nitrogen Cycle Game Discussion Questions:

- 1. How many stops can you make on your trip?
- 2. Will your journey ever end?
- 3. Was everyone's journey the same? Why not?
- 4. Nitrogen (N₂) in the atmosphere is not usable by living organisms. Name two ways that living organisms change nitrogen from the atmosphere into the usable forms (NO₃, NO₂) found in soil.

Look at Atmosphere poster

- 5. Name two ways that nitrogen from the atmosphere can get in to soil without the help of living organisms. Look at Atmosphere poster
- 6. Once nitrogen is in the soil, what type of organisms will use it? What happens to leftover nitrogen that is not used?

Look at Soil poster

- 7. Nitrate (NO₃) is found in fertilizers. How can living organisms use this? **Look at Fertilizer poster**
- 8. What would happen if a farmer used too much fertilizer? (In this game, that would mean that everyone starts from the fertilizer station at the same time.)

Look at Fertilizer poster or look up effect of too much nitrogen in the ground from fertilizers

9. What would happen if we burnt too many fossil fuels?

Look at Atmosphere poster and look up how burning fossil fuels effect the nitrogen cycle

10. Livestock farming creates a large amount of animal waste. How would this affect the nitrogen cycle? Look at animal Waste poster