

Nutrient Cycles Game

Directions

Goal

This game helps us think about how nutrients move through an ecosystem. As players, you are atoms of nutrients that move through a particular ecosystem. The goal as a nutrient atom in the ecosystem is to keep moving. Therefore, whoever moves the most number of spaces (arrows) in a given amount of time wins the game. There is no real rush, however. You should take time to talk with your group about where you are and what is happening to your atom at each turn. The group must make a decision about whether or not you move, according to the type of Encounter Card you draw and your location on the board.

Getting Started

- Place your piece on any yellow arrow on the board. You get to decide where to start.
- Mark your starting point with a small Post-it note with your name written on it.
- Begin with the shortest person going first, then take turns in a clockwise pattern.

Playing the Game

1. Draw Encounter Cards from the pile on the game board. These Encounter Cards will tell you what type of organism you, the atom, are in at a particular moment. The cards also give you instructions on how to move.
2. You can only move if you are in a location on the board where that interaction might actually occur. For example, if you draw a card that says that an owl ate you, but your piece is located underground, you cannot move.
3. Discuss as a group whether or not the interaction is likely to occur, depending on where you are located on the board.
4. Discuss with the group what you think is happening to you, the atom, during each of these Encounters.
5. After twenty minutes or so, the teacher will say, "Time is up." After the game, the class will discuss it and the questions below.

Questions to Think About

1. Why do you move many spaces in some encounters and only one in others?
2. Why do you lose turns in some encounters?
3. Why is the path of nutrients shown with two yellow arrows in connected circles? What does that tell you about how atoms move through ecosystems?

**This game was created by Sarah Mittlefehldt.*