



Decomposer Tag **5rd Grade** **20 minute Activity**

This tag-based game demonstrates nutrient cycling in the food web by highlighting the importance of decomposers.

Great for: Familiarization with local species diversity and understanding of the nutrient cycle for kinesthetic learners.

Time: 20-25 minutes

Materials:

- A large space outdoors or indoors with clear boundaries for playing tag.
- 1 organism card per student (make sure to have a balance of the different trophic levels!)
- Optional: a way for students to wear cards like tape or putting them on string to hang around the neck.

Activity:

Introducing the Activity

1. **Assign students the plant and animal cards** but reserve a few cards and kids to play the decomposer's role in a later round. You can reassure these kids they will be very important later.
* This game can get a little chaotic so it helps clarify the roles of each player by having everyone stand together grouped by category at this point (i.e. producers, herbivores, omnivores & carnivores).
2. Explain that in this game **we will be thinking about what certain living things eat**. Even plants, which make their own food from light, air & water need to get minerals from somewhere. Eating another living thing will be represented in this game by tagging.
3. **Do a roll call:** ask all the plants to raise their hands, then the herbivores, etc. Note that some roles can tag more than one other role; carnivores can even eat other carnivores and omnivores can eat everyone. Then ask the groups to point toward the groups they can "eat".
4. If you have time, you may want to build complexity slowly: only plants and herbivores in the 1st round, then add carnivores for the 2nd round and then the omnivores, etc.

Game Play

5. **Let the tag game play out** with "eaten" players sitting down to signal they are no longer living. **The game should grind to a halt** when almost everyone is tagged.

6. **Take a time out for discussion:** After playing for a while ask the kids what they notice about the length of this game. Why does it always stop? Why do we run out of living players? In nature, how long would the last players live now that they have run out of food? Luckily nature has a way to recycle nutrients so that everyone doesn't run out of food: **decomposers!** Decomposers eat plants and animals that are no longer living (and their waste like dead leaves and scat) and turn them into fertilizer for plants.
7. Finally, **introduce the decomposer students.** Explain that their role will be to revive the students after they are eaten. They will do this by tagging them back into the game. It's more accurate to allow the decomposers to be eaten by other organisms but game play may proceed more quickly if they can't be tagged.

Wrap-up & reflection

8. After playing for a while, stop the game. Ask the students how long the game could go on for now that decomposers are playing? Like nature, indefinitely! What do we call something that keeps repeating on and on? A cycle! What would happen to us if we lost all of our decomposers? Life on Earth would be in trouble!

Take away: Ecosystems in nature work in a never ending cycle of living things eating other living things- whether that's while they are alive or after. The decomposers play a key role in keeping that cycle going and keeping everybody, including us, alive!