

NAME OF THE ACTIVITY: Herbivore, producer, decomposer

GRADE LEVEL: Grades 3-7

RUN TIME: Initially to explain background, rules and play will take 15 minutes or more and background and rules do not have to be done together although correlating the rules with real life application to the background is advised. Subsequent games and options can be done in 5 minute increments.

EQUIPMENT NEEDED: Organism cards, copy of food web,

HIGHLIGHTS: Predator, prey, herbivore, producer, decomposer, running safety in large group running, chasing, team work, cooperation, acting, observing and reacting.

OBJECT OF THE GAME: Don't get caught (eaten)

VOCABULARY: herbivore, producer, decomposer

SET UP: Designate playing area.

PRIOR TO THE GAME EXPLAIN TO PLAYERS: Herbivores are animals that eat producers (green plants). When anything dies, decomposers can break the dead material down into soil. For the purposes of this game – the decomposers can only break down herbivores. Allow time for the players to practice each character.

INSTRUCTIONS: Discuss the organisms involved with this activity, and how they are represented or acted out.

**Herbivores** - Formed by squatting like a rabbit, hands on the ground and hopping

**Decomposers** - Formed by sitting crossed legs, arms crossed

**Producers** – Formed by standing with arms outstretched like branches

Divide the class into two equal teams. Each team will huddle at their own safety zone (opposite end of the playing area, designated by a line or some boundary). In the huddle, teams will agree on an organism to portray during the acting phase. The teams will now face each other about 5 feet apart at the center of the playing area (half-court jump circle on a basketball court).

On the signal, teams will act out the organism on which their team agreed. The winning team will now chase and attempt to tag the players from the losing team. The losing team will attempt to make it back home to their safety area without getting tagged. Players who get eaten/tagged, must join with the other team. After the chase, the process starts again with each team meeting to decide the character to portray. Remember all players from the team must portray the same character. Following are which characters win against other characters:

Herbivores beat Producers - as they eat the producers

Producers beat Decomposers - as they grow from the soil decomposers create

Decomposers beat Herbivores – since they break them down

If both teams pick the same character, nothing happens and each team returns to pick another character. If anyone on either team delays portraying their organism when the signal is given, they are out. The game ends after a pre-determined number of rounds OR when all organisms are on the same team.

### OPTIONAL PLAYING EXTENTIONS:

Option A: Decomposers can eat/tag herbivores as well as producers but they must do so crawling on their bellies like an earthworm might move.

Option B: Herbivores are rabbits and must hop, earthworms must crawl and producers can only move by becoming seeds (forming a ball and doing forward and backward rolls)

Option C: Allow players to answer a teacher created question as a tie breaker if both teams "tie" by portraying the same organism.

### DISCUSSION EXTENTIONS:

Does any one organism have a natural advantage? Why or why not? Is it realistic that producers can move? When can a producer move? (if appropriate bring up seed dispersal, aquatic producers that float, etc.).

How does this game remind you of a cycle? (possibly introduce the nitrogen cycle to older players)

Allow students to add new rules or options to the game based on their research of organisms. Allow them to form a hypothesis of how this rule/option will affect the play of the game, and then run several trials to see if their hypothesis was correct. Make a real life application of the