Runoff Race

Time: 5 to 15 minutes

Description:

This game is designed to simulate of rain runoff. Students will act as raindrops and will race to the “river” under two different conditions. The conditions will demonstrate an unhealthy riparian zone and a healthy vegetated riparian zone. The riparian conditions are as followed: blacktop/pavement (unhealthy), and a mature vegetated corridor (healthy).

Setup:

1. Clear an area in the classroom or move to an area where students can safely jog or run.
2. Make two lines about 10 to 20 feet apart. One line should be the start line, the other line with be the finish line or “river”. Mark boundaries that students should not cross to contain the running. Allow for enough space that students can run without harming each other.
3. Have students line up along the start line side-by-side. If students cannot or do not want to jog or run, allow them to be time-keepers. The teacher should also act as a time-keeper.
4. Tell the students that they are raindrops that are going to race across a “parking lot” to the “river”. At the signal, they will run to the finish as quickly and as safely as they can. The time-keepers will start the stopwatch as people begin running and stop as the last person reaches the finish. Announce the final time (average the times if multiple time-keepers got different numbers) and write them on the board with the title, “Parking Lot”.
5. Pull out at several students (3 to 10 depending on class size) from the raindrop racers. Tell this group that they will be trees. Have the trees stagger themselves within the racing area, have some of them near the start, middle, and the finish line. Make sure none of the trees can touch each other.
6. Explain to the raindrop racers that they will race through a “mature tree riparian corridor” to the “river” like the first race with a few new rules.
	1. If a raindrop touches a tree they pause until another raindrop taps them. Paused raindrops may not tag each other. Remind raindrops that they cannot go backwards to try to tag their fellow raindrops (i.e. raindrops cannot turn around to tag a peer, only the people in front).
	2. Tell the trees that they will be trying to tag the raindrops but cannot move their feet to do so. Remind everyone that tagging is not hitting.
7. The race ends when either all the raindrops are paused or when all non-paused raindrops reach the river. Announce the final time (average the times if multiple time-keepers got different numbers) and write them on the board with the title, “Mature Trees”.
8. Have students return the classroom to its original state and return to their seats. Have a brief discussion about the activity, focus on the following:
	1. Which race had a faster time? Why?
	2. What challenges did the trees provide?
		1. (e.g. bottlenecking of raindrops, pools/puddles of paused raindrops, general slowing of the race to the river)
	3. Why is it important to slow water from reaching the river?