




Hennepin County
Public Works

Environment and Energy Department
701 Fourth Avenue South, Suite 700
Minneapolis, MN 55415-1842

612-348-3777, Phone
612-348-8532, Fax
www.hennepin.us/environment

Water Quality Game Inventory

Image	Item Name	Description	Quantity
	Cones	To separate different zones in game.	29
	Lima Beans	Dried beans used in game. Some have x's drawn on them.	1 bag
	Small reusable bags	Used by participants to collect beans during game.	48
	Webbing	Used as an obstacle in game.	1
	Raccoon Puppet	Used by predator character in game.	1
	Northern Pike Puppet	Used by predator character in game.	1
	Litter Lagoon Aprons	In zipper bag. Wrappers and plastic bags attached. Worn by game participants in Litter Lagoon.	2
	Litter Lagoon Bottle Sash	Worn by game participants in Litter Lagoon.	1



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Water Quality Game, Engagement Guide



Time management note: This activity can be adapted when time is limited by having adult chaperones/teachers form the obstacles. Each round can be run for 3 minutes, with only one predator and one person in the litter lagoon.

Materials needed (included in learning trunk unless otherwise noted):

- 15ft rope or webbing (don't use anything too thin!)
- 1 bag of dried lima, some with x's drawn on them
- 1-2 predator puppets
- 2 Aprons, 1ea with attached plastic bags, wrappers
- 1 water/soda bottle sash
- 13 small cones
- 2-5 Leopard Frog Images to pass around
- Portable white board (Not included)
- White board marker (Not included)
- 35 small tote bags to collect beans in



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Procedure:



- Tell the participants that they are going to play a game that is a **challenge**. A “survival” challenge. Each student is now a frog. Pass around images of Leopard Frogs.
- Ask the students to list the types of challenges they think frogs might face in their lives. Write what they come up with on the portable white board.
- “This game is about the many challenges frogs face in Minnesota. Your goal is to survive. In order to do that you need to get enough food. There are challenges between you and the food. This is kind of like an OBSTACLE COURSE!”
- Walk students through the obstacle course.
 - Obstacle 1: Motor boat (a rope/webbing that two students are squiggling/moving along the ground) If a the rope hits a frog, they have to return to behind the starting line and wait ten seconds to start again.
 - Obstacle 2: (recycle sash, plastic bag apron, wrapper apron) Litterbug Lagoon (2-3 students with arms linked that function as “it” in a game of tag.) The students represent floating plastic bags and other garbage that could tangle and drown frogs. They are wearing aprons with plastic bottles, bags, wrappers, etc. attached. One apron/sash is covered with all items that could be recycled, one with plastic bags, and one with wrappers.) If a frog is tagged by the linked students, they have to return to behind the starting line and wait ten seconds to start again.
 - Obstacle 3: Predator Zone (1-2 students with puppets or vests stand inside designated square zone. The “predators cannot exit the square, but can reach out of it to tag frogs who are collecting food. Food is scattered in and around the square.) Frogs that get tagged must give all food to the



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predator that tagged them and return to behind the starting line. They must count to ten before beginning again.

- For each round secure 2 volunteers to move the rope for the Motor Boat obstacle, 2-3 volunteers the Litterbug Lagoon obstacle, and 1-2 to be predators in the Predator Zone. Switch out volunteers with each round.

Gameplay:

- A frog's goal: start gameplay when the teacher yells "spring!". Avoid all obstacles, pick up one piece of food (can only gather one at a time) and return to behind the start line, then repeat until the teacher signals that the game is over by yelling "winter!"
- When winter sets in (after about 3 minutes) have students return to the start line and count their food. See how much everyone had.
- Next, return all food to the Predator Zone, and play again. Get different volunteers to staff the different obstacles.
- Play 2 rounds.

Round Recap

- What was hard about being a frog? What was easy? What would you change to make life easier for a frog? Was your first trip for food easier or harder than your last one? Why? Any frog that collected less than ____ beans died. Any frog that is holding a bean with an x on it accidentally ate plastic and didn't survive. Have any survivors step forward. Discuss.
- What do you think the linked together students in the litterbug lagoon represent? What could you do every day to make sure the lagoon goes away? (Recycle, pick up litter, reuse) Write ideas on the white board

Final round (2 min)!

- The frog's habitat has been cleaned up by a group of students who are making sure that they and their families recycle and pick up litter when they see it on the streets and sidewalks.
- Final round gameplay: no more litterbug lagoon. No more beans with x's.

Recap

- Was this round easier or harder as a frog?
- What about as a predator?
- What can you do as a human every day to make a frog's life easier?