# Nurdle Hurdle Race

This game is designed to give the students a visual representation of what occurs when nurdles are shipped from facility to facility and around the world. It is meant to get a little messy. Students are going to spill rice. It would probably be best to play this game in an outdoor setting or on a non-carpeted surface indoors.

# Materials

- Spoons enough for each team
- Large bag of rice
- Large container to pour rice into for initial station
- Tables for station stops
- Bottles to collect the rice during the game. We used water bottles, but the idea is to have a bottle with a smaller opening than the spoon. (We want a little bit of rice to spill)
- Solid surface Students will run. We also want the students to see how much rice was spilled. (outdoor basketball court or concreted area with little to no grass)

# **Teacher background**

During transportation of nurdles is when large spills occur. During this game students will see how easy it is to spill nurdles and how hard it is to contain and reclaim the nurdles after a spill. The three major ways of transportation are train, ocean liner, and 18-wheeler.

<u>https://www.nurdlehunt.org.uk/the-problem.html</u> - Great article for additional information and infographs.

# **Teacher Prep:**

This game is messy and rice will be spilled. Use an area that can easily be cleaned or outdoor space where spilled rice and be seen on the ground.

Set up your tables for the game. Diagram below of example. The orientation can be changed to accommodate space, limitation or other factors. The idea is to have varying lengths that students will have to travel.

Separate students into teams – As even as possible. 3 or more students per team.

## Procedure:

Before Game – Here are some questions to get the conversation going. This will get the students thinking about transportation of plastics, the problem of single-use plastics and brainstorm ways to reduce plastic use.

- 1. How do you think plastic is transported around the world? How would we get raw material from California to Mississippi? What about from
- 2. What are some ways to reduce the amount of plastic use?
- 3. How can we help reduce the amount of plastics we use in everyday life?

## Set-up:

In large area set up 4 tables with enough room in between for students to run back and forth. One table will be the START station with a large container filled with rice. (Shoebox size or larger is best) On the other **THREE** tables, place empty containers, one per team. These containers need to have an opening smaller than the spoon, like a plastic drinking bottle. For example, if you split students into three teams, three containers need to be on each of the tables. In each team of students, assign which mode of transportation they represent; train, 18-wheeler and cargo ship. Each student will then ONLY travel to the designated table for the mode of transportation they represent.

Explain to students that this will be a competition to see which team can fill their container the quickest. DO NOT let on that spilling is part of the game. Let that part naturally happen. We want the students to focus on filling the containers and not worry about the spilling.

\*\*HINT\*\* The competition can be played two ways. You can either set a time limit on how fast they can fill the containers. At the end of the time, the team with the largest amount filled wins. **OR** The first team to fill all the containers wins. With this method, mark on the bottle a fill line.

# Start Game:

Each team will line up around the first table

The Student 1 on each team will grab a spoon.

When teacher says go, Student 1 will fill their spoon with as much rice as possible and heads to the transportation table assigned. Fills the team container and heads back. Student 1 hands the spoon to Student 2. Student 2 fills the spoon and heads to designated transportation table and fills team container, then heads back and passes to Student 3 and so forth.

\*\*HINT\*\* Rice that spills on the floor creates a slippery situation. As the game plays, please make sure to watch the amount that is spilled. If too much, clean the play area. Also, it might be a teachable moment if a student stumbles or runs into another student and spills all the rice. Student safety first. Students play until the containers are filled or time runs out. The fastest team WINS!! But does anyone win???

Once game play is over. Start the conversation with students about the game.

Example Questions:

- 1. Was pouring rice into the container easy? Did you spill some rice?
- 2. What was more important during the game? Filling the container slowly with no spill or being the fastest to get back?
- 3. In the real world nurdles are transported by these three vehicles. After playing this game, what are some ways the plastic industry could help prevent spills?