# Role Play Simulation (Inside or Outside)

## **Objectives:**

- 1. Demonstrate how pollution can be passed through the food chain and affect many species.
- 2. Demonstrate the impact that humans have on the environment.

For the role play, you will need to create five groups of students:

- 1. Humans
- 2. Plants
- 3. Fish

- 4. Plant-eating animals (herbivores)
- Animals that eat meat (omnivores or carnivores

The game takes place in a large circle or area which has been divided into two halves. The two halves represent land and water.

Finally, you will use different colored pasta to represent pollutants such as exhaust, garbage and pesticides and food. Don't tell the students which colours represent which things yet.

The game proceeds with a series of interactions that demonstrate how pollution can be passed through the food chain and affect many species.

#### **Materials:**

- Four bags of different coloured pastas or another biodegradable item if you are outside
- Create <u>Role Play Cards for Pollution Game</u> or use sports pinnies to distinguish between your five groups
- 3. Use the cards below if you would like to add in more simulations.



#### **Instructions:**

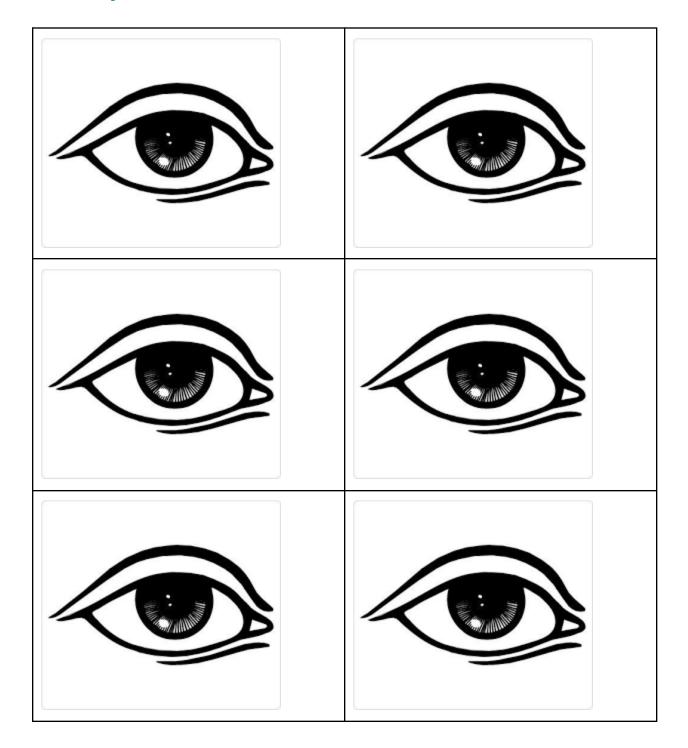
Ask students how different things (plants, animals, people) get their food? Plants, herbivores, omnivores and carnivores. You may want to introduce new vocabulary or just talk about plant eating or meat eating animals.

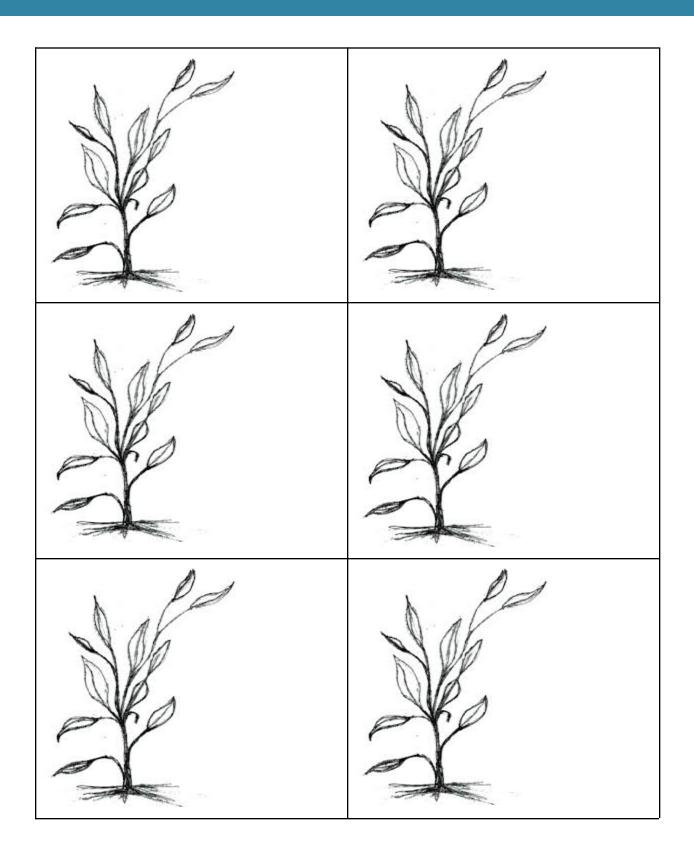
- 1. Spread some of the different coloured pastas all around the simulation area. Do not tell the students what each colour represents yet.
- 2. Plants choose a place to live on land or in the water. When you choose your spot, pick up any of the pasta that you can reach. You are absorbing these through the soil.
- 3. Fish and plant eating animals (rabbits, frogs, birds) go to a plant and eat it. The plant will pass on the pollutants and food (coloured pasta) to you. (The plants can sit down after they are "eaten")
- 4. Next, introduce the humans to fish and the animals that eat small animals (fox, raccoon, owl).
- 5. At the end of the game discuss the pollutants. If you only collected pollutants, and no food what do you think will happen? How do you think they make animals and people feel?

\*\*Add in the <u>extra cards below</u> to play more random simulations to understand their connection to the earth.

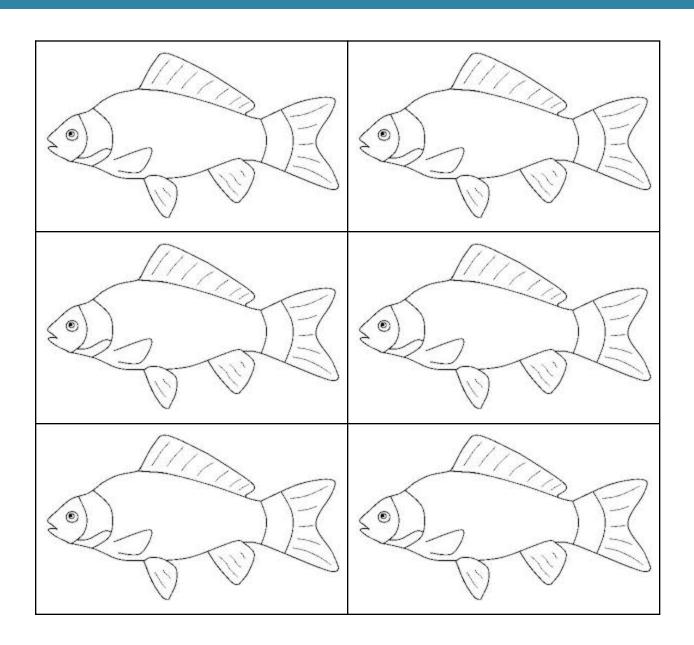


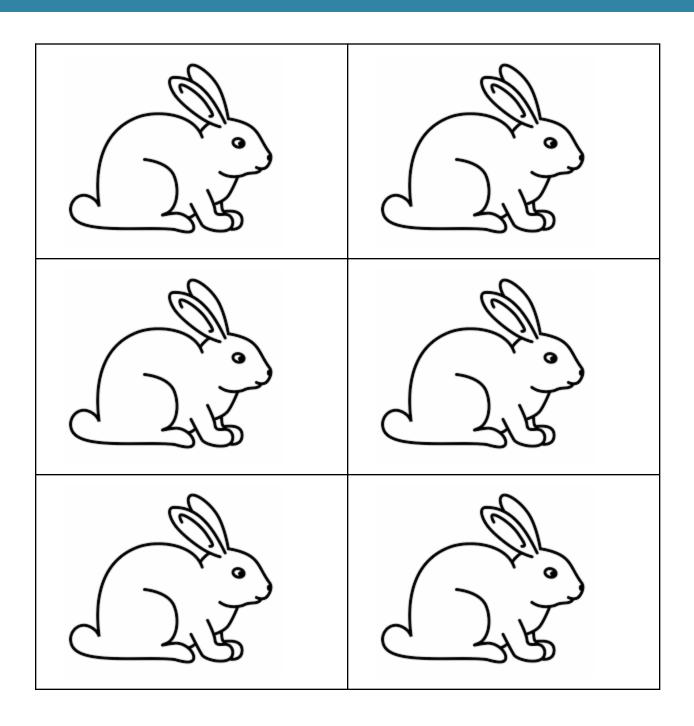
# **Role Play Cards for Pollution Game:**

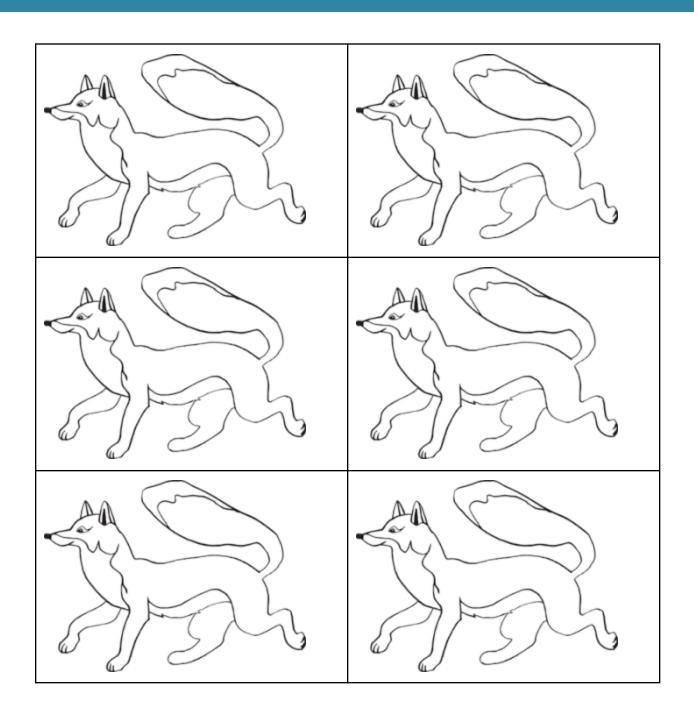












### **Extra Cards for Random Simulations:**

Today is Earth Day. Spend some time picking up all of the garbage. (pick up the coloured pasta that represents garbage)

You created anti-idling posters and there is no idling in this area. (pick up coloured pasta that represents exhaust)





A new law was introduced that bans pesticides. (pick up the coloured pasta that represents pesticides) We planted trees today to help the earth.

(Add some more food)





We don't like weeds so we sprayed the lawns in the neighbourhood. (add more pesticides)

We took our lunch wrappers out for recess and left our garbage in the yard.

(add more garbage)





It is colder outside so we want to keep our cars, buses and trucks running to stay warm.

(add more exhaust)

We cut down trees in our neighbourhood so that we have a better view. (take away some food)



