

Materials Included

1) a population with **genetic variation** (3 phenotypes)



3) 2 different **environments**



shallow environment



deep environment

2) a **limited resource** (food)



large food x25



small food x25

Evenly Distribute 25 Food In Each Environment

(5-6 food in larger holes and 2-3 food in smaller holes)



large food

goes in



shallow environment



small food

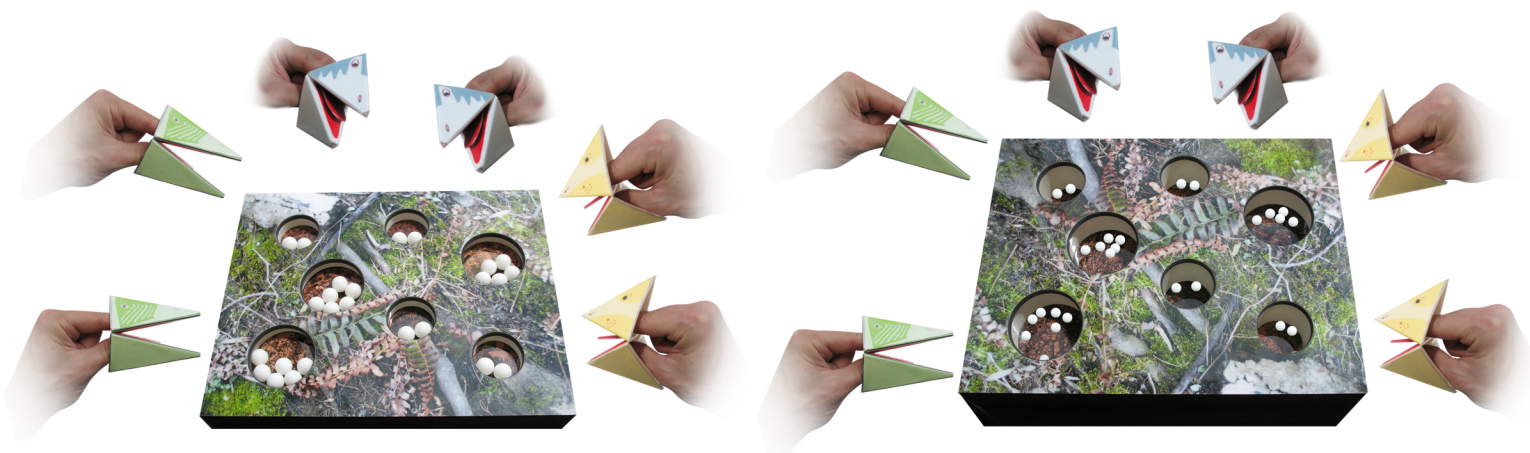
goes in



deep environment

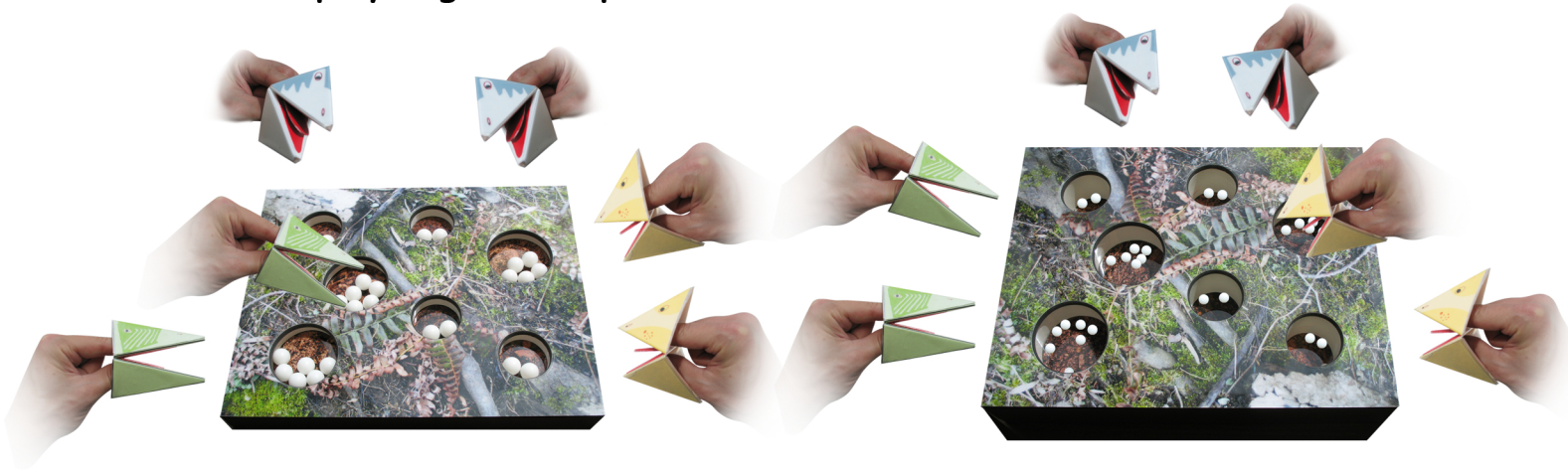
Spawn First Generation

2 of each phenotype at each environment



First Generation Compete!

Take turns competing for food one-at-a-time. Each individual gets two, 10-second turns to gather as much food as possible. Keep track of the amount of food each player gets. Replace the food after each turn.



No Cheating, Please!

You must get the food in your mouth.



"Scooping" does not count. Replace any food that flies out by accident.

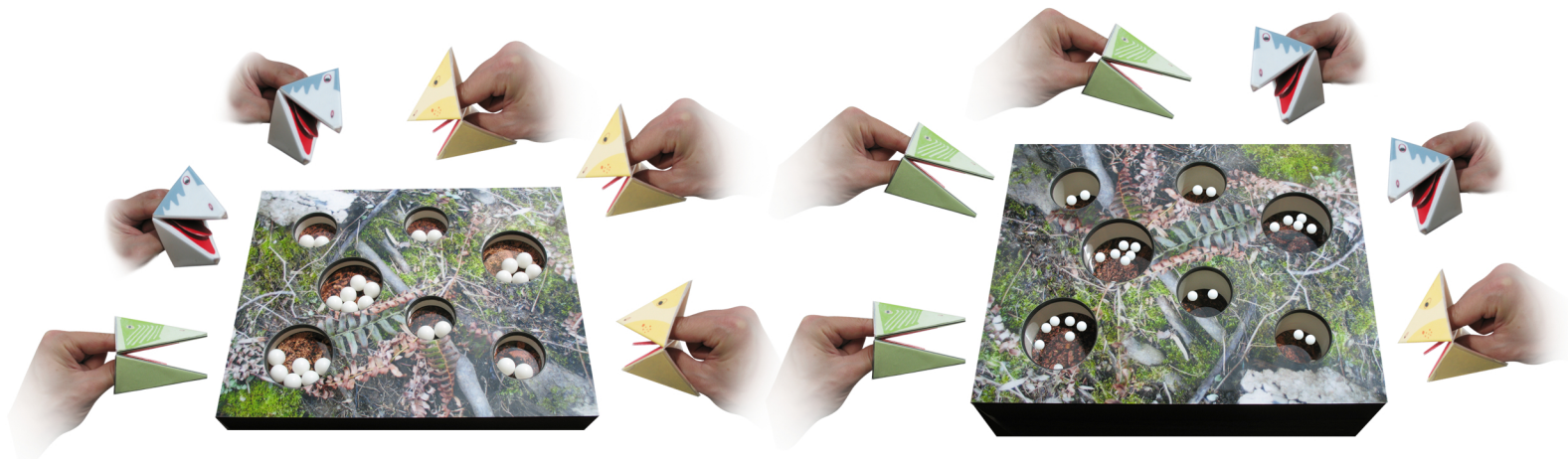
Reproduce!

The total amount of food you acquired in both turns determines the number of offspring you can support.

Tally the results for each individual.

0 food	= 0 offspring
1-6 food	= 1 offspring
7-13 food	= 2 offspring
14-20 food	= 3 offspring
21-25 food	= 4 offspring

Spawn Next Generation



Repeat!