

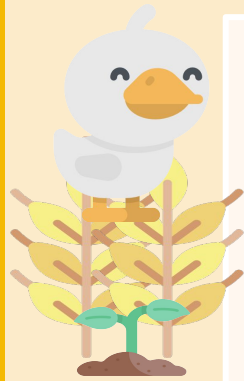
# Feeding Frenzy



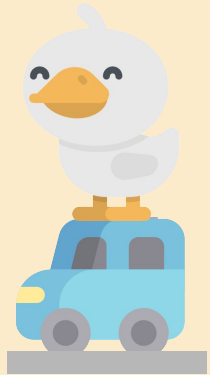
## THE SITUATION:

A duck lives in a field where a new parking lot is going to be built.

**FOCUS QUESTION:**  
HOW DO THE CHANGES in an environment AFFECT WHAT LIVES THERE?



**Will the duck be able to survive in the new parking lot?**

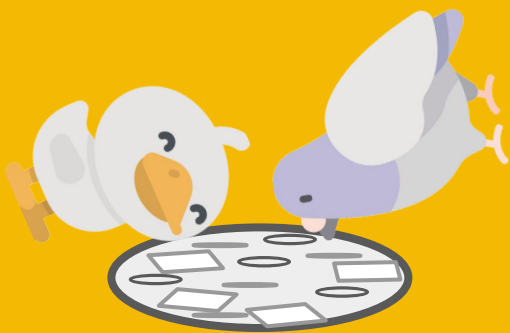


**BUZZWORD:**  
survive

## HYPOTHESIS:

I think the duck will/will not be able to survive in a parking lot because...

Write your answer in this text box, or on a separate sheet of paper (such as in a notebook).



# MATERIALS:

## For the birds:

- 1 plate
- 1 scooping beak (like a spoon)
- 1 pinching beak (like tweezers)
- 1 cup (the bird belly)

## For the food:

- 8 mice (like balls of paper)
- 8 seeds (like grains of rice)
- 8 worms (like rubber bands)
- 8 leaves (like 1" squares of paper)
- Data Table
- Timer

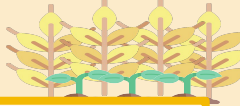
\*Each item in this list is just a suggestion! You may use anything similar. Find more ideas on the Extra Information page!

# EXPERIMENT!

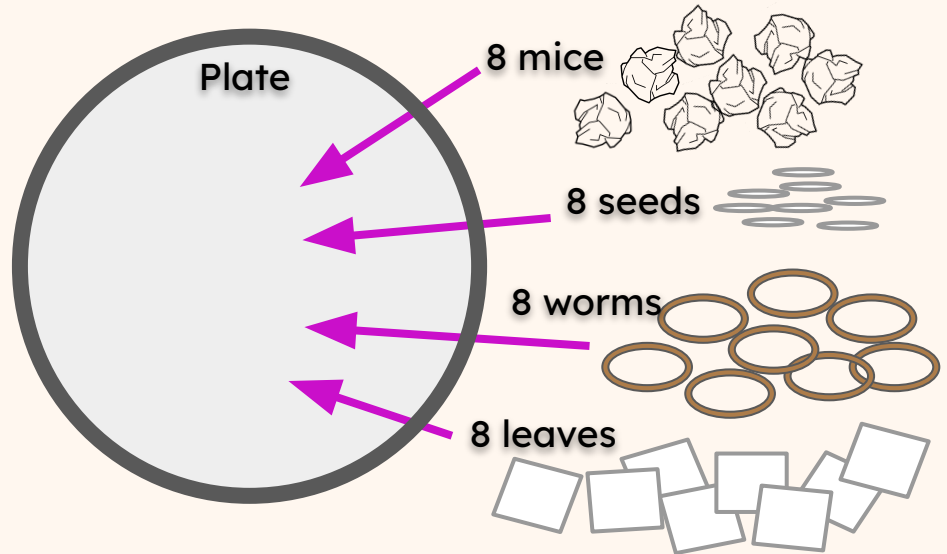


Pretend to be the duck and catch food with your scooping beak. See if you can catch enough food to survive.

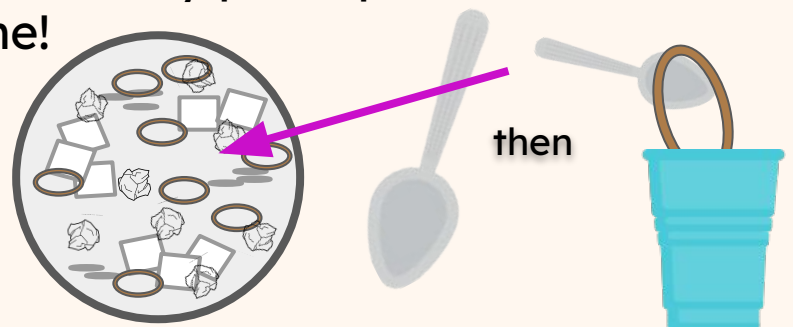
## ROUND 1 - OPEN FIELD



1. Place 8 of each food type on a plate.



2. Set a timer for 30 seconds.
3. Pick up as much food as you can with your scooping beak and put it in your belly until the timer stops. Make sure to only pick up 1 food item at a time!

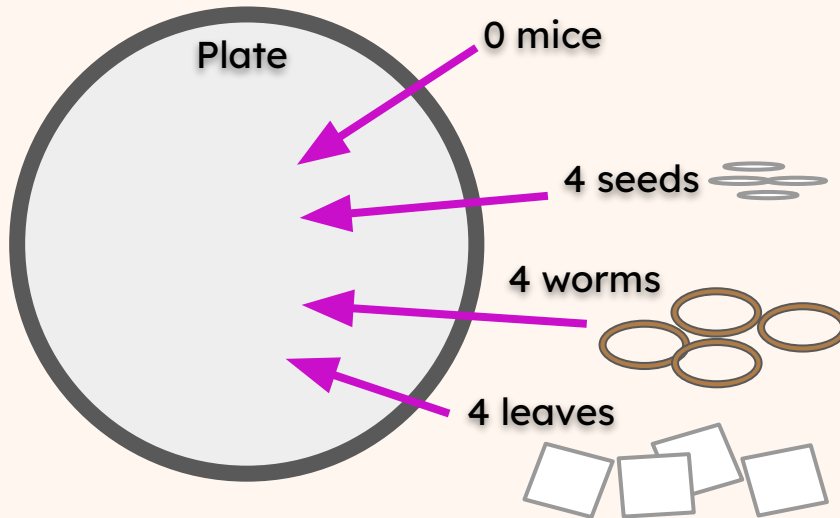


4. Count how many of each kind of food are in your "belly" and **record it on the data table.**



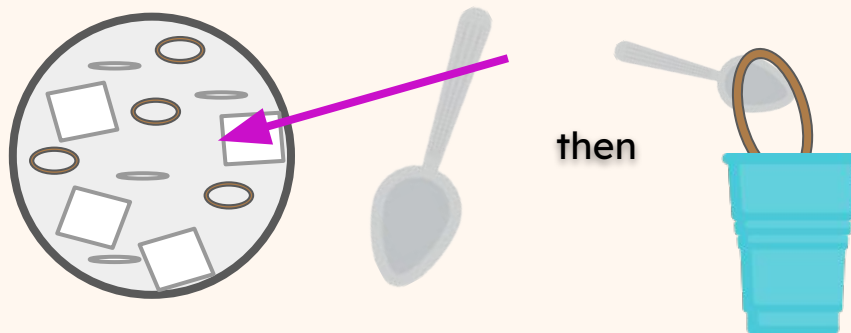
## ROUND 2 - PARKING LOT

5. Place 0 mice, 4 worms, 4 leaves and 4 seeds on the plate .



6. Set a timer for 30 seconds.

7. Pick up as much food as you can with your scooping beak and put it in your belly until the timer stops. Make sure to only pick up one food item at a time!



8. Count how many of each kind of food are in your “belly” and **record it on the data table.**





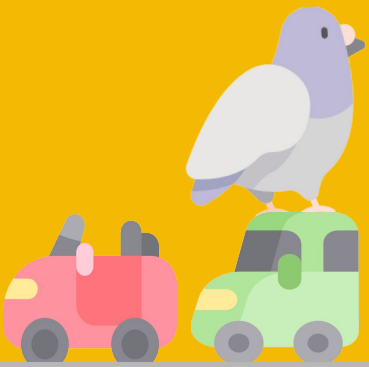
## WHAT'S GOING ON? PART 1

Ducks are picky eaters. In order to survive, the duck **must eat at least 4 worms**. If the duck can catch other types of food too, it will be even healthier.

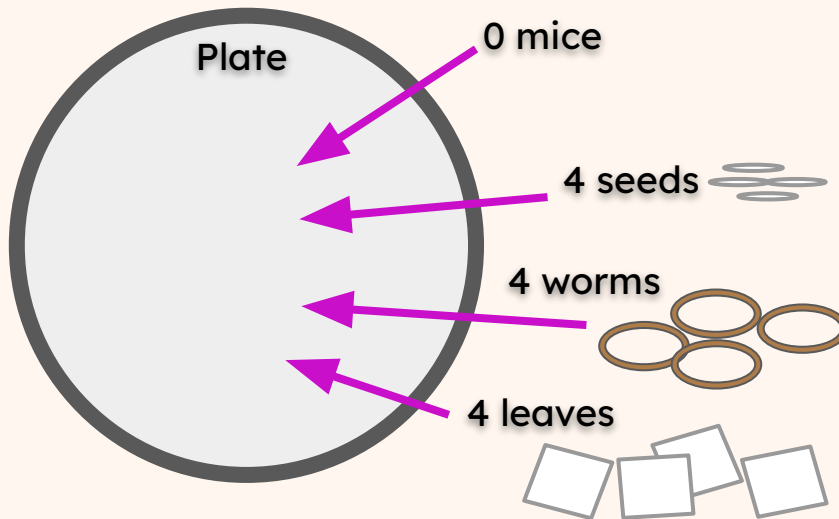
1. Make a claim that your duck was able to survive well, less well, or cannot survive at all in the field. Use your data as evidence.
2. Make a claim that your duck was able to survive well, less well, or cannot survive at all in the parking lot. Use your data as evidence.
3. Look back at your hypothesis. Did the change in the environment affect how well the duck survived? Explain why.

## ROUND 3 - PARKING LOT

A pigeon has just migrated to the parking lot. Pretend to be the pigeon and catch food with your pinching beak. See if you can catch enough food to survive.

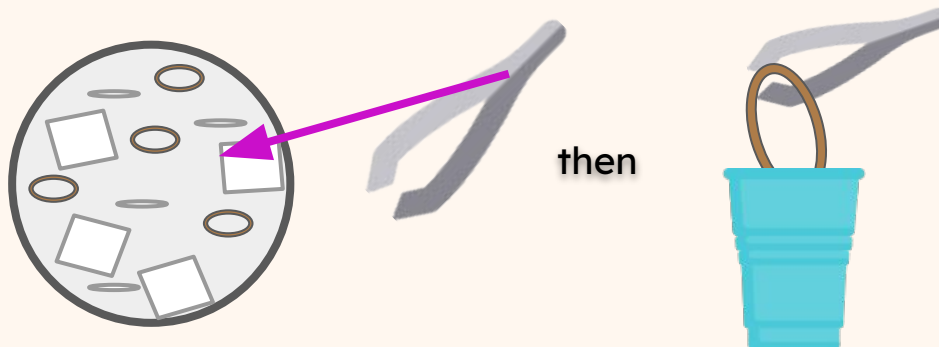


9. Place 0 mice, 4 worms, 4 leaves and 4 seeds on the plate .



10. Set a timer for 30 seconds.

11. Pick up as much food as you can with your pinching beak and put it in your belly until the timer stops. Make sure to only pick up one food item at a time!



12. Count how many of each kind of food are in your “belly” and **record it on the data table.**



## WHAT'S GOING ON? PART 2

Pigeons are not picky eaters. In order to survive, the pigeon **must eat at least 4 pieces of any kind of food**. If the pigeon can catch more food, it will be even healthier.

1. Make a claim that your pigeon was able to survive well, less well, or cannot survive at all in the parking lot. Use your data as evidence.
  
  
  
  
  
  
  
  
  
  
2. Compare the duck's and the pigeon's ability to survive in the parking lot. Make a claim that one bird is able to survive in the parking lot better than the other.

Write your answer in this text box, or on a separate sheet of paper (such as in a notebook).

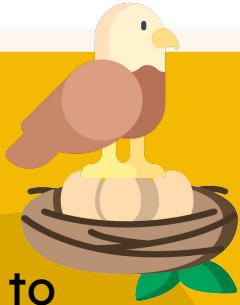
# DATA TABLE

Record how many pieces of food your bird collected for each round. Record the total amount in the last column.

	Seeds 	Worms 	Leaves 	Mice 	Total Amount of Food Collected
Round 1 : Duck in an Open Field 					
Round 2: Duck in a Parking Lot 					
Round 3: Pigeon in a Parking Lot 					

Write your data here, or draw your own on a separate sheet of paper (such as in a notebook).

# EXTRA INFORMATION



Want to take the game a step further? Repeat Round 1 and Round 2 of the experiment using a different type of bird beak.

Examples include:

- Slurping beaks like a hummingbird
- Hooked beaks like an eagle or hawk
- Stabbing beaks like a stork



## DON'T HAVE SOME OF THE MATERIALS?



Try using one of these other items!

### For the Bird Beaks:

- **Scooper Beak:** Spoon, ladle, cup, toy shovel, paper rolled up “taco” style
- **Pincher Beak:** Tweezers, chopsticks, tongs, paper folded into a “V” shape

### For the Food Items

- **Mice:** Anything small and round such as grapes, erasers, marbles, buttons, pom-poms or cotton balls
- **Worms:** Anything thin and floppy such as string, hair ties, twist ties, gummy worms, cooked spaghetti
- **Leaves:** Anything flat and flexible such as pieces of paper or tissue, leaves
- **Seeds:** Anything small and hard such as rice or other grains, sprinkles, beans, beads