

Name: _____

Date: _____



Snurfle Island

Background Button:

What is evolution?

What are some key facts about Natural Selection? Be sure to include the terms: *Natural Selection, Offspring, Population, Adaptations, Limited Resources, Survival, Reproduce & Genetic Changes.*

Play the Game Button:

What is the goal of the game?

The Snurfle Islands:

Fruity Paradise: Lots of fruit and no predators!

Aqua Caves: An underwater playground, or a death trap, depending on your adaptations.

Diverse Isle: Several challenges await your on diverse isle!

Frosty Island: It's cold here! If you can't stay warm, you won't survive and reproduce!

Lava Caves: Beware falling rocks, lava flows, and food scarcity in the lava caves!

Desert Island: It's hot and dry here on Desert Island! Also, food is SCARCE (limited)! Watch out for predators, too!

Aerial Islands: Floating fruit abounds on these small islands, but can you get to it before the completion?

Predator Isle: Predators lurk everywhere on this island! Pick adaptations to help you survive!

The Vortex: This mysterious vortex will transport you to one of the other islands. Will your Snurfle be adapted enough to survive? Since natural selection organisms CAN'T choose their traits to match the environment, this level simulates natural selection most realistically!

Adaptations

Adaptation	Description	Adaptation	Description
Lightning Feet	Allows you to move faster by foot.	Warm Fur Coat	Helps you stay warm in cold environments.
Butterfly Wings	Allows for slow flight.	Dragon Wings	Allows for fast flight.
Gills	Allows for underwater breathing.	Duck Feet	Allows for faster swimming, but make climbing impossible
Camouflage	Allows you to blend in with your environment and avoid predators when you stand still.	Fire Breath	Breathe fire to defend yourself from predators by pressing the fire button
Hang Time	Stronger legs for extra jumping power! Hold down the jump button to have super jumps!	Turtle Shell	Protect your back from predators! Press the down button to hide under your shell.

A few things you should know:



- When choosing adaptations, it'll cost you survival points! So choose wisely!
- Once on the island, you need to search out the fruit to eat. Each fruit is worth 10 survival points.
- You need to find a mate to produce offspring, but you'll only be able to produce offspring if you have a net gain of survival points at the end.
- More survival points = more offspring!

Play the Game!

Fill in the table below: For each Snurfle Island list the adaptations that you find to be best suited for each island. Which adaptations allow you to produce the most offspring and ultimately past down the genes that will carry from generation to generation?

(Your ideal results are Awesome Fitness with the most offspring possible!)

Snurfle Island	Adaptations Needed	Reasons for Adaptations
Fruity Paradise		
Aqua Caves		
Diverse Isle		
Frosty Island		
Lava Caves		
Desert Island		
Aerial Islands		
Predator Island		

Before completing these questions, click the  and take the quiz by clicking . Be sure to submit your results from the game and the quiz to me at the following e-mail address: _____

Questions

1. Which island needed the least amount of adaptations? Why?

2. Which island did you find to need the most adaptations? Why?

3. What did you find to be the most beneficial adaptation overall? Why?

4. What did you find to be the least beneficial adaptation overall? Why?

5. What were some of the limiting factors that your Snurfle encountered during its lifetime?

6. Explain why natural selection is sometimes referred to as "Survival of the Fittest"?

Create a New Species of Snurfles!

In the box below, create a new species of Snurfles that will need to adapt to a newly created island that has just formed in the ocean. Draw and label the new adaptations on your Snurfle. Give your island a creative name and a brief description. Your adaptations must help your Snurfle to survive to pass on its genes for generations to come! Explain how each one does!



Island Name:

Island Description:

Adaptations and Explanation: