# How does a new species

## develop?

#### Use the following slides to fill in this table

Word	Definition	Requirements
Speciation		
Sympatric Speciation		
Allopatric Speciation		

#### What Do You Get if You Cross a Mouse With a Mango?

## Speciation

**<u>Speciation</u>** – the formation of a new species

- Members of the same species must be able to mate and produce fertile offspring
- Mating and, therefore, gene flow, might stop between two parts of population if it splits
- Once populations can't reproduce, speciation can occur

Occurs for several reasons...

## **Allopatric Speciation**

<u>Allopatric Speciation</u> – evolution of a population into a new species, when the population is separated from other members of the original species by a geographic barrier

- Geographic barrier can separate one population into two
- Each population adapts to their new environment and may evolve so much that they can no longer mate
- Once they can no longer mate, they are two separate species

## Sympatric Speciation

<u>Sympatric Speciation</u> – the evolution of a population into a new species when two populations of the same species favor different niches, but only mate within their niche.

- Does not involve any geographic isolation
- Populations favor different food sources or living spaces
- Once they can no longer mate, they are two separate species