

Name: _____

Date: _____

Name that Mechanism!

Below are examples of three evolutionary mechanisms: Natural Selection, Genetic Drift and Gene Flow. Read each scenario and check the mechanism it is describing.

Scenario	Natural Selection	Genetic Drift	Gene Flow
1. Lions live in the south Sahara Desert in breeding groups called prides. Females tend to stay in their pride, but males may leave to join another pride.			
2. Red, white and blue butterflies of the same species were released in a field to celebrate Independence Day. Most of the butterflies survived due to the red and white flowers that grew in the field, but the blue butterflies were easily seen by predatory birds.			
3. A population of red, yellow and pink roses in a local nursery were damaged by a storm. The nursery staff saved what they could, but they were left with only red and yellow roses once they cleaned up.			
4. A rancher raised a prize breeding bull and bred several of his female cows with him. Another rancher bought the bull and brought it to his ranch to replace the bull he had recently lost. He put the bull out to pasture with his cows.			
5. A population of Canadian geese traveling south flew through a storm. Two of the geese were blown off course and had to land for the night. The next day they heard another population of Canadian geese flying overhead and joined them in their migration.			
6. In Cuttlefish, large males will protect females from other males to prevent them from mating. The small males, however, will mimic the color and shape of a female to swim under the large male and mate with the females, passing on their genes.			
7. A random process that occurs in nature.			
8. A nonrandom process that occurs in nature.			
9. A pond containing round tailed guppies, flat tailed guppies and pointed tailed guppies began to dry up. After several weeks of no rain, the only guppies left were either round tailed or pointed tailed.			
10. Rabbits began to populate a rock layered canyon. Grass was available on different layers. As rabbits ate grass on the canyon floor it began to diminish quicker than it could grow back. Only those rabbits that had legs strong enough to allow them to hop onto higher levels of the canyon were able to find enough grass to eat to survive.			

Define Natural Selection: _____

Define Genetic Drift: _____

Define Gene Flow: _____
