

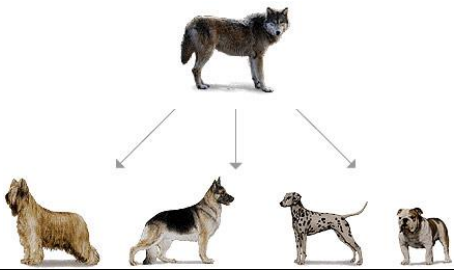
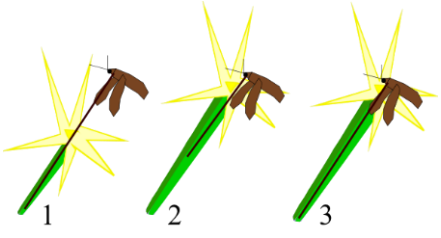
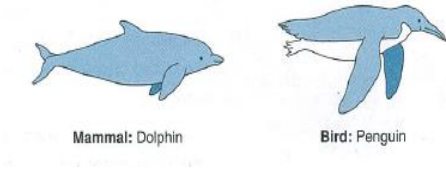
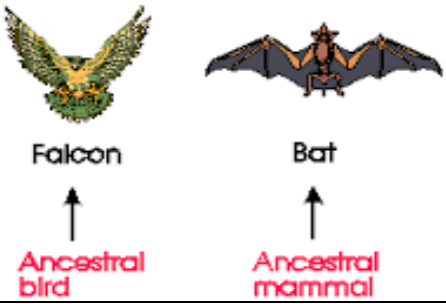

Name: _____ Date: _____ Period: _____

Patterns of Heredity and Random Mechanisms of Evolution

Directions: Read the scenarios below and check the type of evolution that each describes.

	Convergent Evolution	Divergent Evolution	Co- Evolution	Punctuated Equilibrium	Gradualism
1. Over time the stripes on tigers developed in size and shape to better hide in tall grass.					
2. Both large cats and wolves have canines to help them grab and hold on to their prey. Both use them for ripping and tearing.					
3. African elephants have developed large ears to aid in cooling the body in the heat of the savannah. Their close relative, the Asian elephant, has smaller ears because they live in cooler areas. African elephants are also larger, taller and longer than the Asian elephants.					
4. As smaller lizard like reptiles hid in rock crevices to avoid larger predators and feed on smaller insects they found that shorter legs could get further in and find more insects. Over time through many generations snakes evolved as the legs were slowly lost.					
5. A sticky tongue is useful for catching and eating small insects. The poison dart frog and anteater both use this method of feeding.					
6. Some plants are toxic to protect themselves from insects. In response, insects have evolved ways to become resistant to the toxins.					
7. In human evolution, fossil study has shown that species remained stable for long periods of time then abruptly changed.					

Directions: Study the images below and check the type of evolution that each represents.

	Convergent Evolution	Divergent Evolution	Co-Evolution
<p>8.</p> 			
<p>9.</p> 			
<p>10.</p> 			
<p>11.</p> 			
<p>12.</p> 			

Directions: Read the scenarios below and check the type of evolution that occurred.

	Genetic Drift	Gene Flow
13. A bee picked up pollen from a sunflower in one field and carried that pollen to a new population of sunflowers in another field across a river.		
14. A population of lizards in a jungle included red, green and yellow colors. Over time the recessive trait of yellow did not show in many offspring.		
15. Many wild monk parakeets have made their home in a colony located in Kemah, Texas. A local pet store accidentally let several of their monk parakeets escape. They joined the wild parakeets in Kemah.		
16. A flock of geese were migrating south when they flew through a wind storm. Several of the geese were blown off course and landed in a lake nearby. The next day they heard a new population of geese flying over and joined them to continue their migration.		
17. A certain type of plant produces blue or yellow flowers. During a fire, many yellow flowers were destroyed. Now only blue flowers are produced.		

Questions (circle the correct answer):

18. If new organisms move from one population into another but fail to breed and reproduce with the new population, does gene flow still occur? **(YES / NO)**
19. Genetic drift results in the genetic variation **(INCREASING / DECREASING)** in a population.
20. Gene flow results in the genetic variation **(INCREASING / DECREASING)** in a population.