



GENETIC VARIATION IS A CORE CONCEPT in genetics and provides the foundation for evolutionary change. A striking example of this variation is found in the wolf, *Canis lupus*, which is native to North America, Europe, Asia, and Africa. Although this species is commonly referred to as the gray wolf, variation in coat color is widespread, including gray, black, white, cream, brown, and red, sometimes with all colors combined. In many cases, fur color helps them to blend in with their surroundings. For example, wolves with white fur are prevalent in the arctic and northern tundra of Russia, whereas those with black fur are found in North American forests.