

## structural adaptations -

### 1. King snake

The harmless scarlet king snake, mimics the coloring and patterns of the deadly coral snake. Predators are less likely to attack the scarlet king snake, thinking that it is the type of snake that could possibly kill them.



Left -> the deadly coral snake

right -> the king snake

### 2. Peppered Moth

The peppered moth population has adapted to its environment. In forests with little pollution, trees such as willows and birches have light-colored bark. Light-colored peppered moths blend in with this bark and are less likely to be spotted and eaten by predators. Light color is a favorable adaptation in these forests.



## Physiological adaptation -

### 1. Spiders

Spiders have a special way to not get stuck in their own nets.

They developed three different ways to protect themselves from the sticky liquor on the thread.

The first one is pretty tricky. Spiders can produce different threads from up to seven different spider glands. Only cross threads are “glued” with the sticky liquor. The framework is without glue. As the builder of the net, the spider knows exactly where it sticks and where it does not stick.

The second one is about her legs and foots. They are full of dense hairs called setae. They ensure the smallest possible contact with the ground. Nevertheless, the spider never sets its tarsen as much as possible on the thread, but avoid large-area contacts.

The hairs of a spider are also good for something else, that's the last thing.

On the surface of the hairs the glue rolls off.

The spider behaves similar to a water runner: He also uses small, in his case water- repellent foot hair, to not sink into their own hunting grounds.

*I'm sorry but i can't put a picture of a spider in here because i have a really strong spider phobia. And when i'm talking about really strong that means, just seeing a picture of a spider makes me cry... It was already a big fight to search for this information because there where several pictures of spiders on the website... But in the end i think they are really interesting animals and i knew about this ability before because i watched a movie about it, back in Germany ( it was not the best idea but it was really interesting) i just wanted to google it again to assure that i remembered it right.*

### 2. Sharks

Sharks have gills, which take in oxygen directly out of the water. Because of its gills, sharks can stay underwater and not have to come to the surface to breathe.

Sharks have also high Urea and TMAO in their body to compensate for the difference between their lower body salts and the ocean so they do not lose water to the ocean, and a special organ to excrete the salt uptaken from the water.



## **behavioural adaptation -**

### **1. Dolphins**

They often hunt shoals of fish in large groups. In the process, they circle the swarm in ever-narrow circles, producing a curtain of bubbles that surrounds the prey like a net. The dolphins take the view of the fish and thus prevent them from escaping.



### **2. Golden Eagle**

Turtles belong to the prey of greek golden eagles. That's why they have developed a technique to crack the animals' hard tanks. To do this they pack their prey, fly in the air and drop it from higher altitude.

