

# Similarities of Frogs & Humans

By Audrey Farley

There are many different species of frogs across the world, some of which are deadly and poisonous and some of which are harmless to humans. Frogs are classified as amphibians, while humans are classified as mammals. Nonetheless, frogs and humans bear much in common in terms of anatomy and bodily functions.

## Body Structure

The body structure of frogs and humans is comparable. Both frogs and humans have skin, bones, muscles and organs. Further, both frog and human bodies can be broken up into a head, a neck, a trunk and limbs. The head in both frogs and humans contains the brain, mouth, eyes, ears and nose, and is supported by the neck. Frogs also have teeth and a tongue, like humans, even though their teeth are weak and useless. The trunk of the frog and the human houses most of the major organs, except the brain.



## Organs

Frogs and humans share the same basic organs. Both have lungs, kidneys, a stomach, a heart, a brain, a liver, a spleen, a small intestine and a large intestine, a pancreas, a gall bladder, a urinary bladder, a ureter, a cloaca. Males and females of each species have testes and ovaries respectively. On the whole, their organ structure is similar, but frogs have considerably less complex anatomies. They do not have ribs or a diaphragm.

## Vertebrates with Nervous System

Frogs and humans have similar systems, including nervous, circulatory, digestive and respiratory. Both are classified as vertebrates, with a spine and nerves that spread across the body. Both frogs and humans have very developed senses of hearing, which is managed by the nervous system. However, frogs can only detect high-pitched sounds with their ears; low-pitched sounds are detected through the skin. Both frogs and humans also have developed senses of sight and smell.

## Circulatory, Digestive and Respiratory System

Both species also have a circulatory system, which operates as the heart pumps blood throughout the body. However, frog hearts are only three-chambered, with two atria and one ventricle compared to the human's two atria and two ventricles. Additionally, frogs and humans have similar digestive and respiratory systems. Although frogs inhale and exhale through the mouth only (while humans inhale and exhale through the mouth and nose), the internal organs involved in the respiratory process function much the same way.