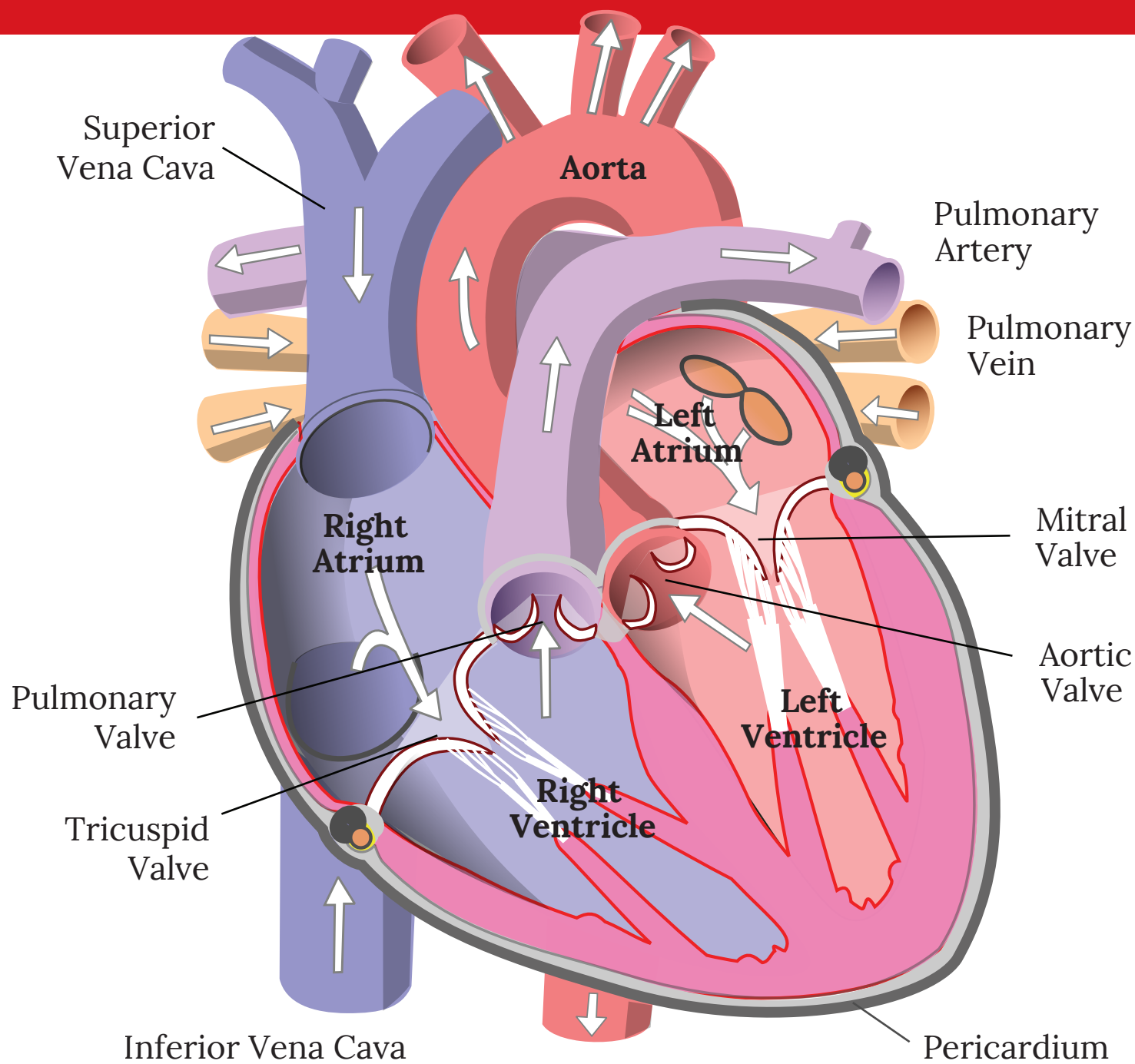


# THE SCIENCE BEHIND The Heart

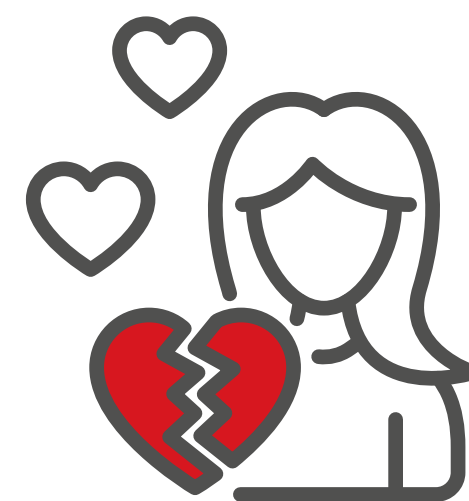
## What is the heart?

The heart is a muscular organ, found in many animals. In humans, and other mammals, the heart is divided into four chambers. Fish have a two chambered heart, while reptiles have a three chambered heart. The heart pumps blood throughout the body. Valves within the heart ensure that blood only flows in one direction. Blood that is low in oxygen is pumped through the lungs, where oxygen is absorbed and carbon dioxide released. This oxygenated blood is then pumped throughout the body. The beating of the heart is rhythmic, with the pulse rate changing in response to various stimuli.



## Big Hearted?

- ♥ The average human heart weighs 300 g and is the size of a fist
- ♥ Each year your heart pumps enough blood to fill an olympic sized swimming pool
- ♥ Giraffes are the land mammal with the largest heart, weighing in at about 11 kg
- ♥ Blue whales have the largest heart of any animal at a whopping 180 kg
- ♥ Dogs have the largest heart-to-body ratio



## Broken Hearted?

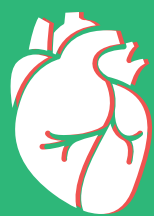
- ♥ Heart disease is the leading cause of death in the United States of America
- ♥ 1 in 10,000 people will have the apex of the heart on the right rather than on the left
- ♥ The first heart valve replacement was performed in 1962



## How to Love Your Heart

- ♥ Do 30 minutes a day of cardio exercise
- ♥ Manage your stress
- ♥ Don't smoke
- ♥ Have a balanced diet

## INTERESTING FACTS ABOUT THE HEART



- 1 The lowest resting heart rate on record is 27 bpm.
- 2 The left heart is usually larger than the right because it has to pump blood to the entire body.
- 3 The race horse Secretariat had an unusually large heart, estimated to weigh 22 lbs. The average thoroughbred heart is 8.5 lbs.
- 4 Every cell in the body gets blood from the hearts, except for the corneas.
- 5 The beating sound is caused by the clap of valves opening and closing.