



The Human Heart

artery = a path that carries blood from the heart to the body

average = normal

beat = Schlag des Herzens

chamber = a part of the heart that is separated from other parts by a thin muscle

cell = a very small part of something living (=Zelle)

chest = Brust

contract = to become smaller

fist = if you press your hand together to make it round like a ball you call this a fist (= Faust)

make sure = sicherstellen

oxygen = is in the air that we breathe = (Sauerstoff)

passageway = small ways or paths through the body

process = Vorgang

relax = rest

separate = trennen

squirt out = hinausspritzen

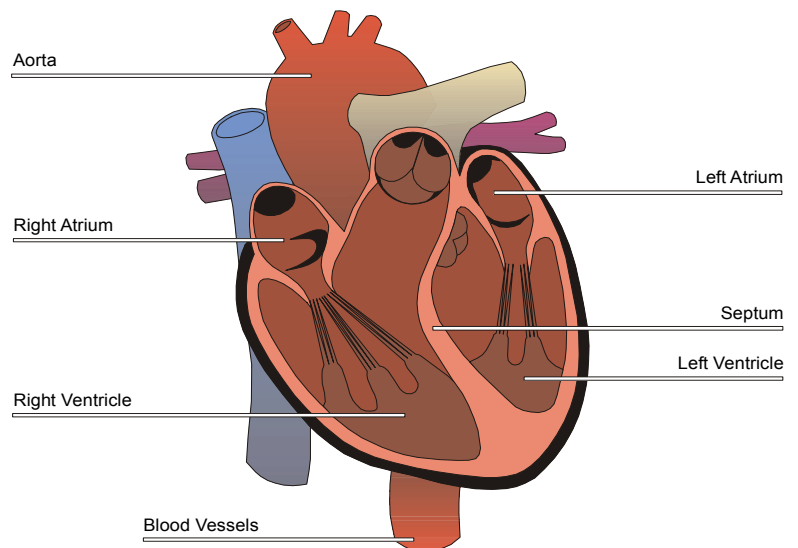
valve = Ventil

The human heart is a muscle that lies left of the **chest**. It has about the size of a **fist**. The heart is like a pump that sends blood around your body. The blood gives you the **oxygen** you need. An **average** heart pumps about 70 millilitres of blood into your body with every **beat**. That's about 5 litres every minute or about 7200 litres every day.

PARTS OF THE HEART

The heart is made up of 4 **chambers**.

There are two chambers on each side of the heart. The top two chambers are called the atria. They fill with blood. The two chambers at the bottom of the heart are called ventricles. Their job is to **squirt out** the blood. In the middle of the heart there is a thick muscle called the septum that **separates** the left and the right side.



The atria and ventricles work together. The atria fill with blood and when they are full they let the blood into the ventricles. When these ventricles pump the blood out of the heart, the atria fill up again and the whole **process** starts again.

There are **valves** in the heart that **make sure** that the blood is pumped in the right direction. When the heart **contracts**, it pumps blood from its chambers into the body. Then the heart muscle **relaxes** and lets the chambers fill up.

BLOOD CIRCULATION

Every **cell** in your body needs oxygen to live. The role of the heart is to send blood that is full of oxygen to all the cells in your body.

The **passageways** that carry this blood are called blood vessels. **Arteries** carry oxygen-rich blood to the cells that need it. The largest artery is the aorta. Veins carry



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adult = a grown up person

caused = verursachen

clogged = verstopfen

contraction = to make something smaller (das Zusammenziehen)

flow = fließen

heart rate = the number of times your heart beats every minute

pain = Schmerzen

pick up = aufnehmen

press = to push hard on something

suddenly = if something happens very surprisingly (=plötzlich)

survive = to stay alive (=überleben)

upcoming = if something is going to happen soon

blood back to the heart again. It is pumped into your lungs where it **picks up** oxygen and then goes back to your heart, from where it is pumped back again into your body. It only takes about 20 seconds to pump blood to every cell of your body.

YOUR HEARTBEAT

Even though your heart is inside you, you can see it work by feeling your pulse. You can find your pulse in many parts of your body. It's best to **press** your finger on the inside of your hand, just below the thumb. You can feel a small beat under your skin. This is **caused** by the **contraction** of your heart.

When you rest or sleep your heart does not beat that fast—about 60 to 80 beats a minute. When you run around a lot your heart pumps more blood into your body—maybe up to 200 times a minute.

CHANGING HEART RATES

As people grow older their **heart rates** change. A newborn baby has a heart rate of about 130, a three-year old has about 100 and an eight-year old's heart beats about 90 times a minute. An **adult** has a heart rate of about 70 to 80. The older you get the slower your heart beats.

HEART ATTACK

Your heart is probably the most important part of your body. If it stops pumping blood you cannot **survive**.

The greatest danger for your heart is a heart attack. It happens **suddenly** and is like an explosion. When the heart stops pumping blood, muscles must die because they cannot get any oxygen.

In some cases blood is not able to **flow** through the blood vessels because they are **clogged** up. So the heart does not get enough blood to work. Chest **pain** may be a possible warning sign of an **upcoming** heart attack.

HOW TO KEEP YOUR HEART HEALTHY

Most people are born with a healthy heart, but it's important to keep it healthy.

- ☞ Your heart is a muscle. It needs **exercise**. About twenty minutes of exercise a day will keep it strong and healthy.
- ☞ Eat different kinds of food and don't eat too much fat.
- ☞ Smoking is bad for your heart.



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CHOOSE THE CORRECT ANSWER !

1. **Blood vessels that carry blood to your body are called**
 - a. veins
 - b. arteries
 - c. ventricles
 - d. chambers
2. **Blood gives us**
 - a. oxygen
 - b. exercise
 - c. chest pain
 - d. air
3. **Our heart is a muscle that always needs**
 - a. running
 - b. cells
 - c. exercise
 - d. food
4. **The septum is**
 - a. a chamber in your heart
 - b. a beat of the heart
 - c. a muscle in the middle of your heart
 - d. a passageway in your body
5. **Veins bring blood into the**
 - a. lungs
 - b. heart
 - c. muscles
 - d. skin
6. **When people grow old their heart rate**
 - a. stops
 - b. gets faster
 - c. gets slower
 - d. stays the same
7. **The greatest danger for your heart is a**
 - a. damaged muscle
 - b. broken chamber
 - c. heart attack
 - d. chest pain
8. **Which of these habits is bad for your heart**
 - a. exercise
 - b. smoking
 - c. careful eating
 - d. drinking water
9. **Your heart beats fastest when you**
 - a. talk
 - b. stand
 - c. sleep
 - d. run around a lot
10. **What jobs do the atria have ?**
 - a. They pump the blood into your body
 - b. They bring the blood back to the heart
 - c. They fill up with blood
 - d. They warn you when a heart attack is coming.
11. **The heart has about the size of**
 - a. an elbow
 - b. a head
 - c. a fist
 - d. a hand
12. **Ventricles**
 - a. pump blood into your body
 - b. pump blood into the lungs
 - c. pump blood into other heart chambers
 - d. put oxygen into your blood



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COMPLETE THE FOLLOWING SENTENCES !

1. If you eat too much fat and don't exercise enough you might get a _____
2. The small paths that carry blood through your body are called _____
3. The human heart is made up of 4 _____. The upper two are called the _____ and the lower two are the _____.
4. The blood of our body needs _____ which it sends to the cells.
5. The human heart is about the size of a _____.
6. The paths that carry blood to the cells are called _____.
7. You can see your heart work by feeling your _____.
8. _____ is a warning sign of a possible heart attack.
9. _____ is bad for your heart.

ANSWER THE FOLLOWING QUESTIONS IN YOUR OWN WORDS !

What are the atria's job ? _____

What happens when the heart contracts ? _____

How does the heart know in which direction it has to pump blood ? _____

How long does it take to pump blood to every cell of your body ? _____

What happens when the heart muscle relaxes ? _____

How many times a minute does the heart of an adult normally beat ? _____

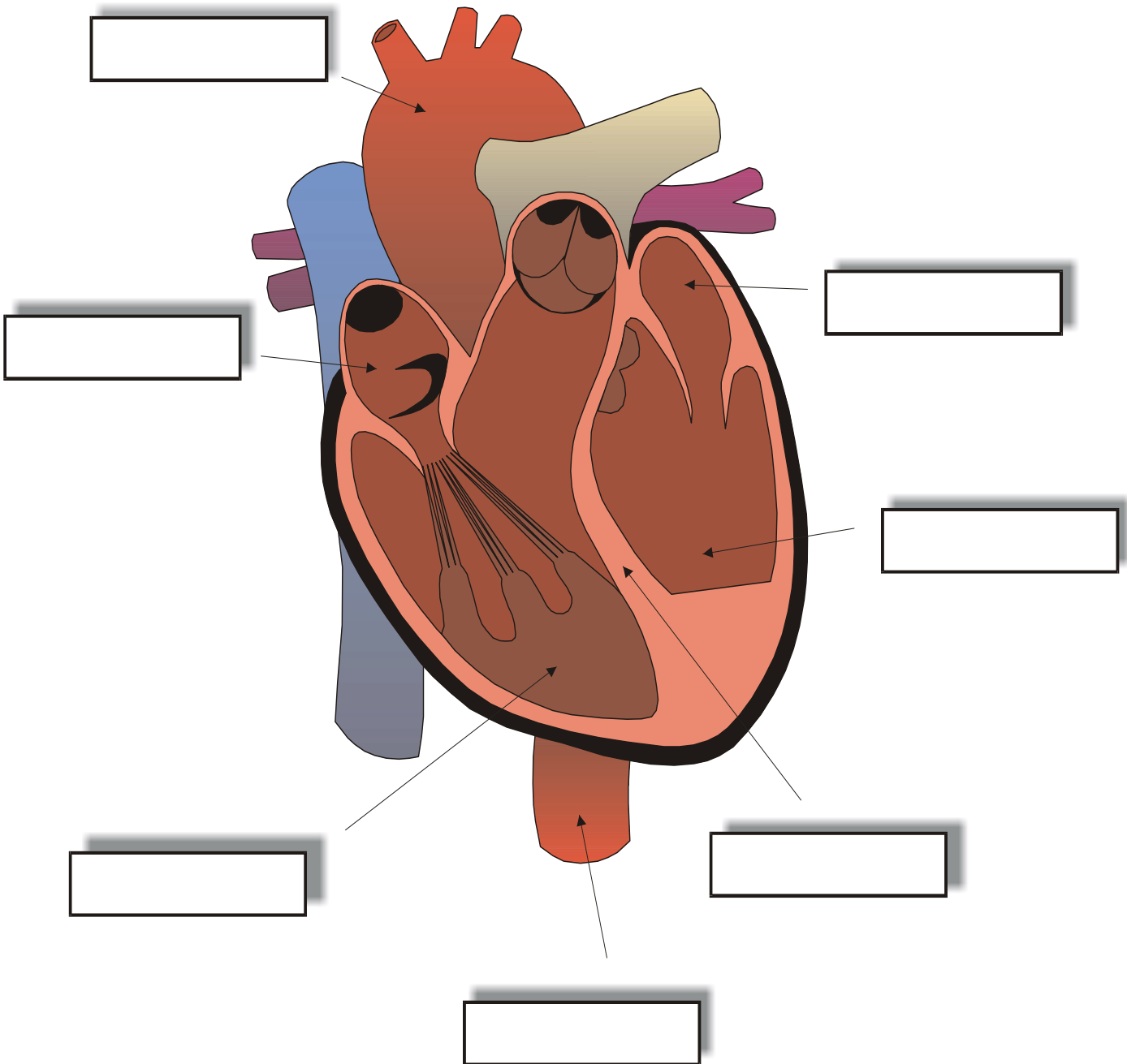
What should you do to keep your heart healthy ?

- a. _____
- b. _____
- c. _____



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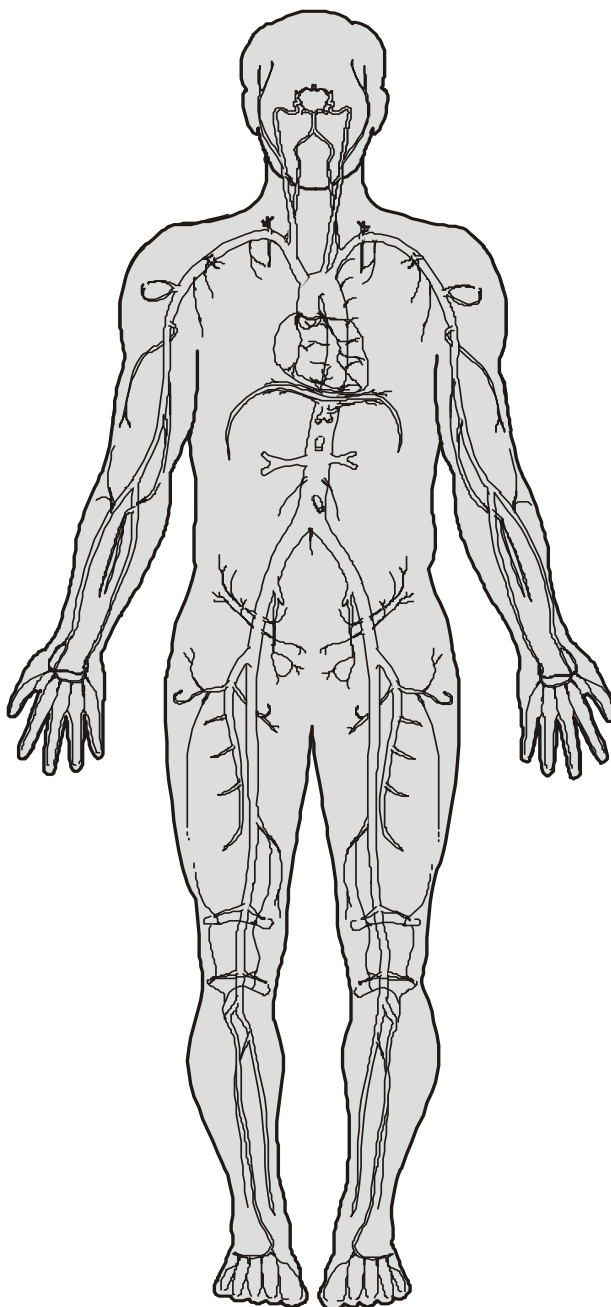
PUT THE NAMES OF THE PARTS OF THE HEART INTO THE BOXES





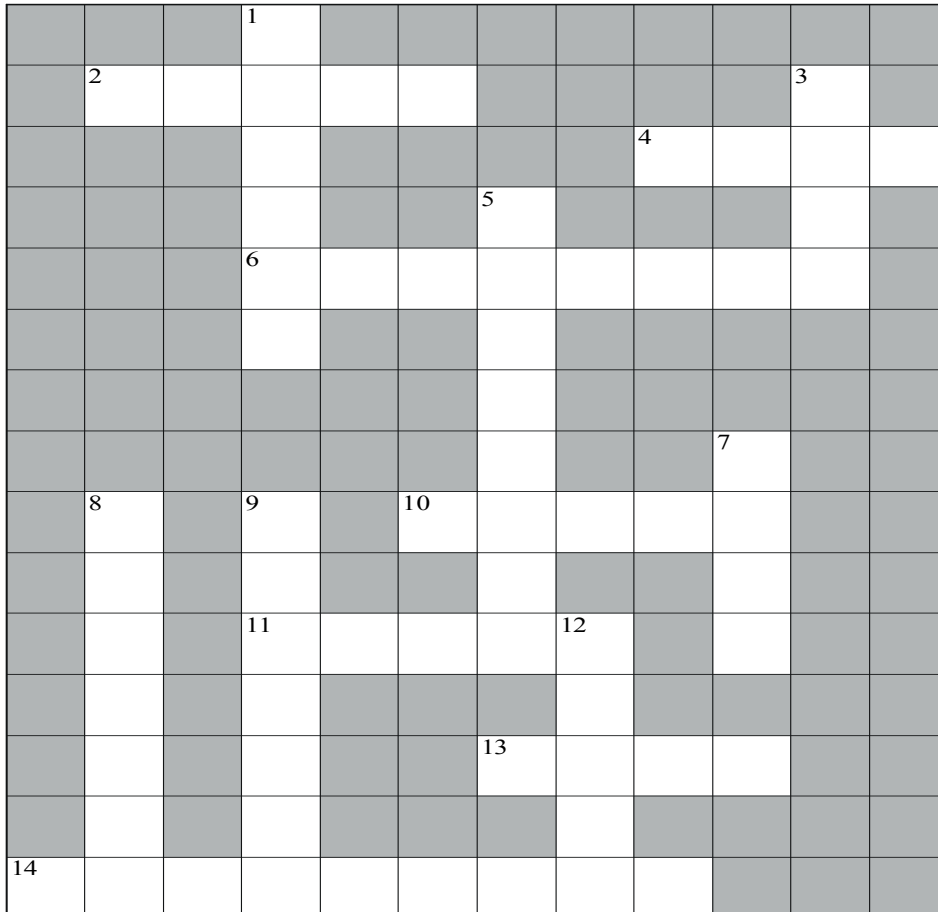
The Human Heart

THE HUMAN BODY AND ITS BLOOD VESSELS





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Across	Down
2. Brust	1. muscle that separates the parts of a heart
4. a very small part of something living	3. verstopfen
6. if something is going to happen soon	5. to become smaller
10. Ventil	7. path that brings blood from the body back to the heart
11. the biggest artery	8. to stay alive
13. place where blood gets its oxygen	9. one of the four parts of the heart
14. the number of times your heart beats in a minute	12. a grown up person



The Human Heart

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¹⁴ H	E	A	R	T	R	A	T	E					



The Human Heart

A rectangular box containing various syllables: mus, um, Cir, cles, la, sep, cu, tum, tion, cise, ven, ex, o, a, cle, tri, gen, er, tri, ty.

Create 7 words from the syllables in the box . All of them have something to do with the heart .
