

## Heart Glossary

Here are some important words for your study of the heart.

**aorta:** artery that carries blood from the heart to all other arteries

**aortic valve:** semilunar valve between the left ventricle and the aorta

**artery:** blood vessel that carries oxygenated blood to the body

**atrioventricular valves:** valves found between the atria and the ventricles

**atrium:** top chamber of the heart into which blood enters; there are two atria (plural) in the heart

**auricle:** flap of tissue that covers the atrium

**bicuspid valve:** valve between the left atrium and left ventricle; also called the mitral valve

**blood pressure:** the push of the blood in all directions

**blood vessels:** tiny tubes that transport blood to every cell in the body; includes arteries, veins, and capillaries

**capillary:** tiniest of the blood vessels

**cardio-pulmonary bypass:** another name for the heart-lung machine

**chambers:** spaces inside the heart

**chordae tendinae:** cords that keep the atrioventricular valves from opening in the wrong direction

**cholesterol:** chemical found in animal fats

**circulatory system:** the system of blood, blood vessels, and the heart; it is involved in moving the blood and lymph throughout the body; the body's transportation system

**contract:** to shorten; to reduce in size by squeezing or drawing together

**coronary artery:** artery on the surface of the heart that supplies the heart itself with blood; there is a right coronary artery and a left coronary artery

**coronary sinus:** large vein into which most of the veins carrying oxygen-depleted blood from the heart empty; part of the special circulatory system that supplies blood to the heart itself

**diaphragm:** sheet-like muscle located below the heart; involved in breathing

**electrocardiogram:** picture of the wave pattern made by the tiny electrical impulses that the heart makes as it beats

**endocardium:** inner lining of the heart

**heart:** strongest muscle in the body; when it pumps, it makes a sound described as lub DUB

**heart attack:** illness caused when part of the heart muscle begins to die from lack of oxygen

**inferior vena cava:** vein that receives blood from all veins in the lower body and delivers it to the heart

**mitral valve:** valve between the left atrium and the left ventricle of the heart

**myocardium:** muscular layer of the heart

**oxygen:** gas that is necessary in the production of energy by the cells

**pacemaker:** a group of special cells that create electric impulses that travel over a network of nerves through the heart; impulses cause the muscle of the heart to contract

**papillary muscles:** raised "bumps" in the ventricles where the chordae tendinae are attached; part of the muscle of the ventricle

**pericardium:** fluid-filled sack that surrounds and protects the heart

**plasma:** liquid part of the blood

**platelets:** small, round structures in the blood that help the blood to clot

**pulmonary artery:** artery that carries blood from the heart to the lungs; the bluish blood picks up oxygen in the lungs; there is one on the right and another on the left side of the heart

**pulmonary valve:** one of the semilunar valves; located between the right ventricle and the pulmonary artery

**pulmonary veins:** veins that carry blood from the lungs back to the heart; there are two on the right and two on the left side of the heart

**pulse:** the movement of an artery as it stretches and relaxes with the flow of blood from the heart

**red blood cells:** blood cells that carry carbon dioxide back to the lungs and oxygen to the other cells

**semilunar valves:** valves found between the arteries and ventricles

**septum:** muscular partition that divides the heart into a left pump and a right pump; it is about one half-inch thick

**sphygmomanometer:** device used to take blood pressure

**stethoscope:** tool used by doctors to listen to internal body sounds

**superior vena cava:** vein that receives blood from all veins in the upper body and delivers it to the heart

**tricuspid valve:** valve between the right atrium and right ventricle

**valve:** little "door" within the heart that closes to keep blood from flowing in the wrong direction; also found in veins

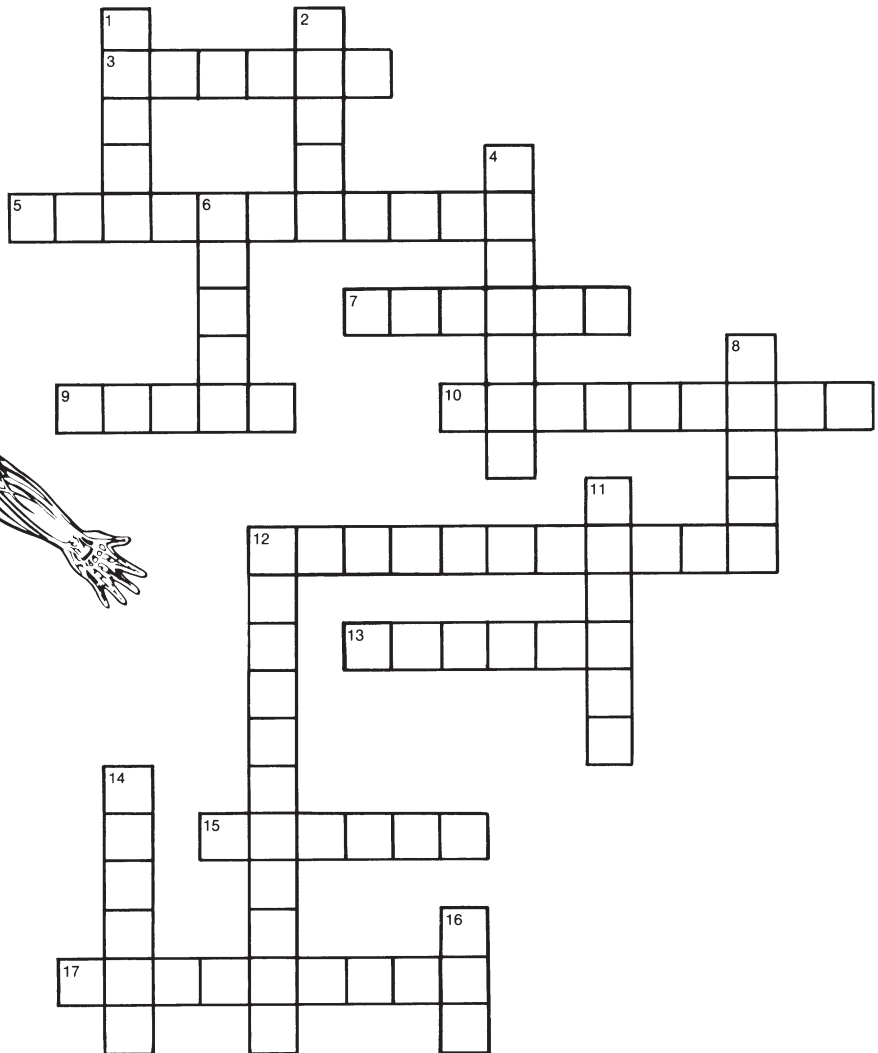
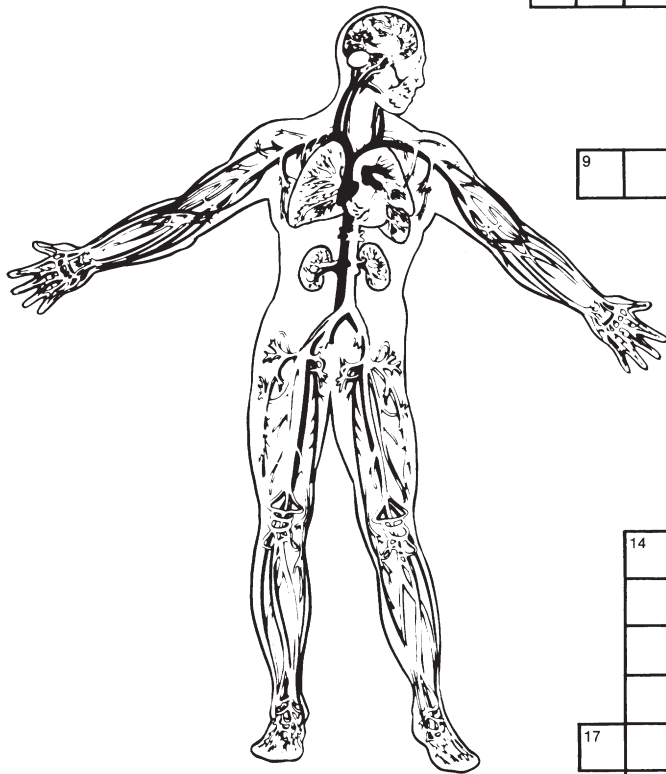
**vein:** blood vessel that brings blood back to the heart from parts of the body; uses the squeezing motion of the muscles to move the blood

**ventricle:** lower chamber on each side of the heart; there is a right ventricle and a left ventricle; the ventricles squeeze blood into the arteries.

**white blood cells:** blood cells that fight infection

## The Circulatory System Crossword Puzzle

Use the clues at the bottom of the page to solve this puzzle.



### Across

3. A "room" in the heart where the blood enters is called an \_\_\_\_\_.
5. The doctor uses a \_\_\_\_\_ to listen to your heart.
7. The liquid part of your blood is called \_\_\_\_\_.
9. The \_\_\_\_\_ blood cells fight invading bacteria.
10. The \_\_\_\_\_ break apart and cause blood to clot.
12. The \_\_\_\_\_ are the smallest of the blood vessels.
13. The heart is the strongest \_\_\_\_\_ in the body.
15. The red blood cells carry \_\_\_\_\_ dioxide back to the lungs.
17. The \_\_\_\_\_ is the part of the heart that squeezes blood into the arteries.

### Down

1. A "little door" in the heart is called \_\_\_\_\_.
2. The heart \_\_\_\_\_ the blood.
4. The blood travels through the blood \_\_\_\_\_.
6. The \_\_\_\_\_ is two pumps in one.
8. The \_\_\_\_\_ bring blood back to the heart.
11. An \_\_\_\_\_ brings oxygenated blood to the body.
12. The \_\_\_\_\_ system delivers food and oxygen to the cells in the body.
14. The cells in the body need \_\_\_\_\_ to survive.
16. The \_\_\_\_\_ blood cells carry oxygen to the other cells.

## Exercise and Your Pulse

Your pulse is the movement of an artery as it stretches and relaxes with the flow of blood from your heart. To see how exercise affects your pulse, try the activities below. After completing each activity, take your pulse. Beside each activity write the number of "pulses," or beats, that you felt in one minute. (Remember to use your first two fingers and take your pulse at your neck or wrist, wherever it feels strongest.) Make sure that you let your pulse return to normal before going on to the next activity.

ACTIVITIES	PULSE AFTER ACTIVITY IS COMPLETED
lying down	
sitting	
standing	
jumping (fifteen times)	
jumping (thirty times)	
jumping (forty times)	
jumping (sixty times)	
sit-ups (fifteen)	
sit-ups (thirty)	
your favorite exercise number of times _____	

## The Heart Word Search Puzzle

The heart words from the list below are hidden within this Heart Word Search. Find the words and circle them. When you are finished, place the letter of each word on the line beside its description. (You may put more than one letter on a line.)

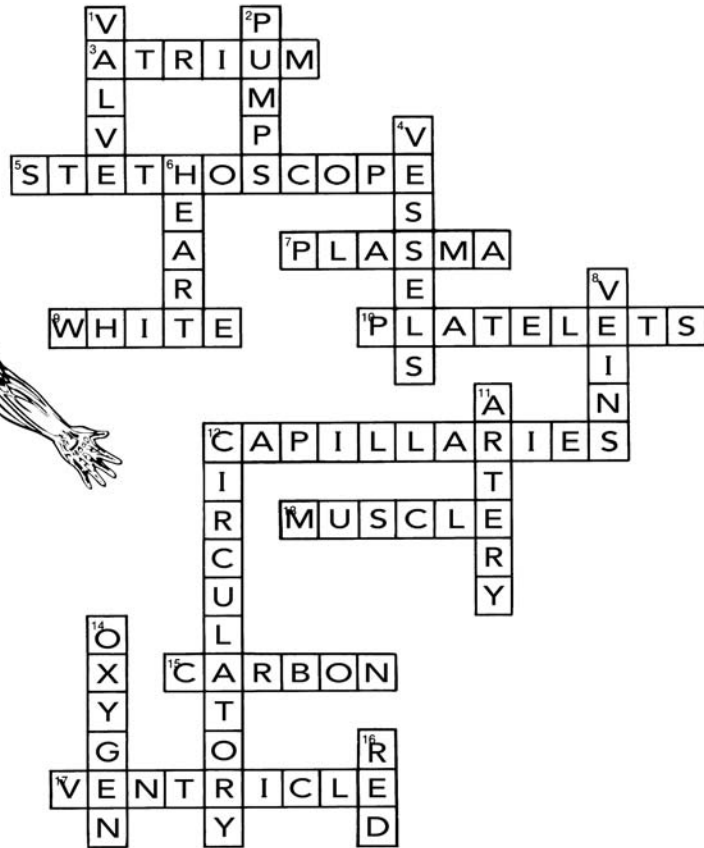
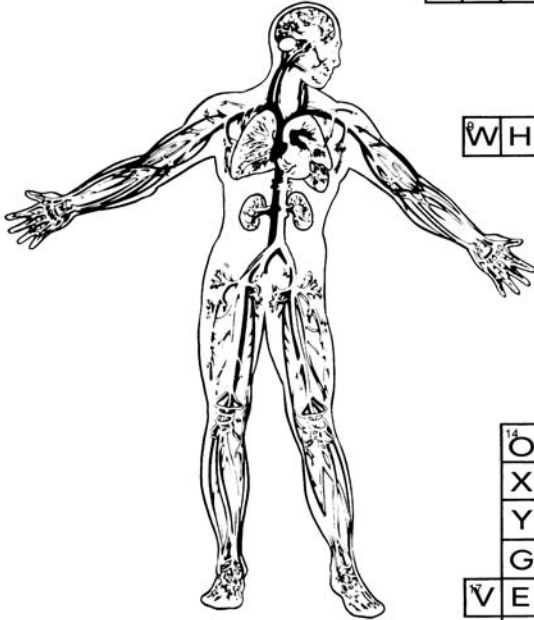
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S	V	C	N	L	P	F	L	R	Y	C	J	F	M	V	L	U	A
H	N	E	Z	Q	O	N	T	N	P	V	L	R	C	D	S	G	T
I	V	M	K	I	Q	O	C	H	O	R	D	A	E	Q	C	E	R
W	X	F	P	T	J	Q	D	B	I	C	C	E	D	O	Y	A	I
O	B	R	P	U	V	I	V	P	E	X	N	X	L	R	N	S	O
S	T	P	R	L	L	C	T	P	R	T	R	R	A	Y	B	T	V
S	E	U	J	S	C	M	A	R	P	E	X	L	K	O	S	E	E
C	L	L	F	N	E	G	O	R	I	T	S	U	R	S	X	T	N
U	A	S	G	V	L	M	E	N	T	C	Q	S	J	V	A	H	T
R	Q	E	C	R	U	T	I	X	A	E	U	S	U	I	P	O	R
X	Z	P	L	G	B	G	O	L	T	R	R	S	V	R	G	S	I
K	I	Q	J	B	D	H	V	Y	U	H	Y	I	P	H	E	C	C
A	O	R	T	A	U	V	A	J	R	N	F	C	E	I	K	O	U
H	L	N	S	A	B	D	R	K	U	F	A	X	W	S	D	P	L
X	O	E	M	I	T	R	A	L	J	J	T	R	I	O	A	E	A
S	P	H	Y	G	M	O	M	A	N	O	M	E	T	E	R	G	R
E	L	N	W	N	Q	M	U	I	Y	F	V	A	L	V	E	S	O

Match the names to the correct descriptions. You may place more than one letter on a blank. Not all letters will be used.

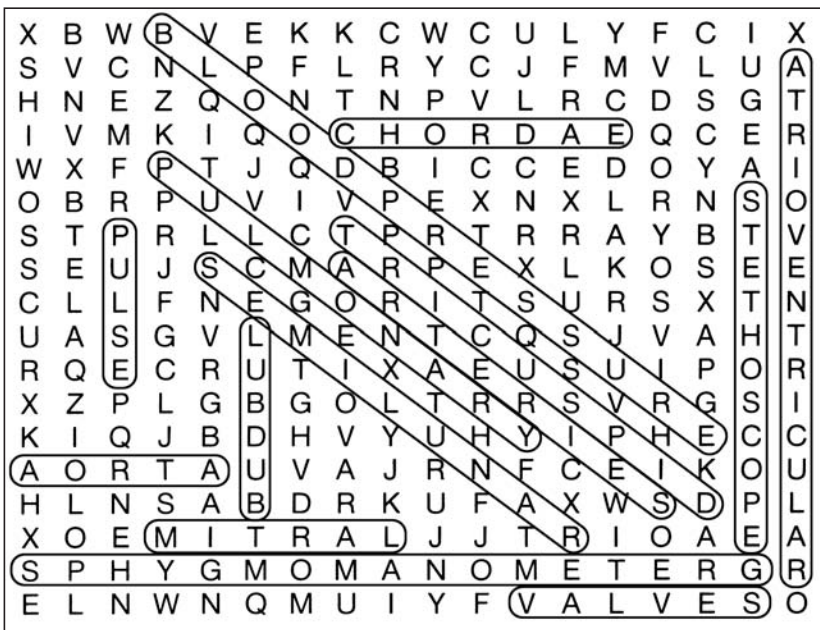
- |                     |                     |       |   |
|---------------------|---------------------|-------|---|
| a. tricuspid        | h. valves           | _____ | 1. keeps the blood from flowing backward within the heart         |
| b. aorta            | i. atrioventricular | _____ | 2. device used to take blood pressure                             |
| c. pulmonary        | j. chordae          | _____ | 3. sound made by the heart  |
| d. semilunar        | k. pulse            | _____ | 4. device used used to listen to heart sounds                     |
| e. arteries         | l. mitral           | _____ | 5. names of valves  |
| f. sphygmomanometer | m. stethoscope      | _____ | 6. cords that hold two heart valves in place                      |
| g. blood pressure   | n. lub DUB          | _____ | 7. main artery leaving heart                                      |
|                     |                     | _____ | 8. you can feel this as your arteries stretch and relax           |
|                     |                     | _____ | 9. the push of blood in all directions within the blood vessels   |
|                     |                     | _____ | 10. blood vessels that carry oxygenated blood away from the heart |

# Answer Key

## The Circulatory System Crossword Puzzle



## The Heart Word Search Puzzle



1. h
2. f
3. n
4. m
5. a, d, i, l
6. j
7. b
8. k
9. g
10. e