

GLOSSARY

Alveoli Tiny air sacs in the lungs where oxygen is taken up by the blood and carbon dioxide is released into the lungs and breathed out.

Antibody A substance carried in the blood that helps destroy unwanted bacteria and viruses.

Artery A tube that carries blood away from the heart. Most carry oxygen-filled blood to the body's organs and tissues but the pulmonary artery, which runs from the heart to the lungs, carries blood with very little oxygen in it.

Bacteria Tiny living things made up of only one cell. They can only be seen through a powerful microscope. Some bacteria live inside other cells. Some types cause disease.

Capillaries The smallest type of blood vessels, whose walls are only one cell thick.

Cell A tiny "building block" which makes up all the tissues in all living things. The blood provides it with nutrients and oxygen and removes waste from it. A cell is like a miniature factory, producing proteins and many other vital substances.

Chromosome A tiny, thread-shaped body inside the nucleus of a cell. Chromosomes are made of tightly wound strands of DNA and proteins.

DNA (deoxyribonucleic acid) A molecule found in chromosomes whose structure encodes a living thing's genes.

Enzyme A substance, usually a kind of protein, that speeds up chemical reactions. Enzymes help the body to digest food and obtain energy from it.

Genes The instructions contained in the

chromosomes and which are passed from parent to offspring. Because they control the way in which all the cells are built, they determine a living thing's characteristics.

Membrane A thin, sheet-like tissue that lines body parts or organs.

Molecule A combination of atoms of different types bonded together. A molecule is the smallest part of a substance that can exist by itself and still possess its chemical properties.

Nerve A group of long, thin cells that carry messages between the brain and the rest of the body.

Nutrients Raw materials that a living thing must obtain in order to make and repair its body. For humans, nutrients are proteins, carbohydrates, fats, vitamins, and minerals.

Organ A structure made of different kinds of cells that does a particular job in the body. The brain, stomach, and skin are all examples of organs.

Proteins Chemical substances found in all living things that carry out many essential tasks. For example, in humans they form enzymes, which allow chemical processes to take place; they make up other substances that protect against diseases; they are found in muscles, skin, and cartilage.

Vein A tube that carries blood to the heart. Most carry blood drained of oxygen but the pulmonary vein, which runs from the lungs to the heart, carries blood with fresh oxygen in it.

Virus A tiny, disease-carrying living thing, visible only under a powerful microscope. Viruses can only reproduce themselves inside the cell of another living thing.