

SCIENCE 310

PHYSICAL CHANGES

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I. PHYSICAL CHANGE

Do you know about anything that never changes? God never changes. In the Bible, God says He is the same yesterday, today, and forever. We are glad God does not change or we would not know what He was going to do. Just about everything else does change. Some things change quickly. Some things take a long time to change. Everything that lives goes through change. When things grow, they are changing. Plants change, animals change, and even you are constantly changing in many ways as you grow. This section will review some of the ways plants, animals, and people change.



WORDS TO STUDY

carbon	(kär' bun	The gas exhaled from the lungs.
dioxide	dī ok' sīd)	
chlorophyll	(klôr' u fil)	Green coloring material in plants.
conscience	(kon' shuns)	A sense of right and wrong.
creative	(krē ā' tiv)	Being inventive; able to create.
environment	(en vī' run munt)	Everything that surrounds us.
maggot	(mag' ut)	The larva of a fly.
mineral	(min' ur ul)	A natural substance found in the earth; necessary in small amounts to keep living things healthy.
multiply	(mul' tu plī)	To increase.
nostril	(nos' trul)	The openings in the nose.
survive	(sur vīv')	To remain alive; to live longer.



Ask someone to say these words with you.

CHANGE IN MAN

Some of the important things we need to live are air, food and water, exercise, and rest. What we remember about these four

things will make a big difference in how we live and change.

Air is needed for life. We get air by breathing in. The air that we breathe enters the mouth or **nostrils**. Then the air travels through a tube called the windpipe. The windpipe branches out into smaller tubes in the lungs. Tiny blood vessels supply blood to the lungs which take the oxygen from the air you breathe in or inhale. Oxygen is the part of air that helps your body work. When you run, jump, and play hard, a lot of oxygen is used by your muscles. The blood from the lungs takes the oxygen to all parts of the body. As your body works or plays, it uses the oxygen and produces **carbon dioxide** as a waste product. This waste is taken back to the lungs again and up the windpipe for you to exhale or breathe out. The air you exhale has a lot of carbon dioxide in it. Your body needs to get rid of this carbon dioxide.

The food you eat is very important to your health. You have a choice to make each day. The choice is to eat good food or to eat food that is not good for you. The good food is food from the four food groups. The four food groups are milk, meat and eggs, vegetables and fruits, and bread and cereal. Food eaten every day from each of these groups will make your body healthy.

Foods such as candy, gum, chips, and soda pop are called junk foods. Junk foods are not needed by your body and can harm it. You also need to drink plenty of water each day to stay healthy.

Exercise and rest are very important for a healthy body. Exercise keeps your muscles healthy. Your muscles give shape to your body. Your bones would not move without the help of muscles. Do you remember that your heart is also muscle? Your heart needs exercise, too. Many things happen when you run and jump. Your heart beats faster. You breathe harder. Your muscles get stronger. Best of all, you feel better. Exercise is healthful.

To take good care of your body, you must also give it rest. You cannot exercise all the time. A good sleep is very important to good health. You should sleep at least ten hours every night. Older people do not need as much sleep each night. Their bodies are not growing like yours.



Complete this activity.

- 1.1 Name the four food groups. Beside each group write the name of a food from that group.

Food Group	Food
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____



Make a list.

- 1.2 Write four important things for a healthy body.

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



Use these words to complete these sentences.

air	windpipe	inhale
blood	carbon dioxide	lungs

- 1.3 To breathe in means to _____ .
- 1.4 The body inhales _____ .
- 1.5 The tube that carries oxygen to the lungs is the _____ .
- 1.6 The part of the body used in breathing is the _____ .

- 1.7 The _____ carries the oxygen to all parts of the body.
- 1.8 The waste material that we breathe out is called _____ .
-

God gave life to all people. He also gave life to all plants and animals. God made plants, animals, and people different from each other.

God created people to be special. Each living person has a **conscience**. Your conscience helps you know right from wrong. God also gave you a spirit. You are a spirit, you have a soul, and you live in a body. God speaks to us through our spirit. Animals and plants do not have a conscience or a spirit. Animals behave by instinct.

A person is different from an animal. Your mind helps you to understand, choose, and learn. You can learn much more than an animal. Your mind helps you to be **creative**. People can create new things, such as spaceships. Animals cannot make things. The things people do are also very important to God. He tells us in His Word that we should do good things.