

SCIENCE

Student Book

▶ **3rd Grade** | Unit 10

SCIENCE 310

CHANGE, SOUND, AND HEAT

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LIFEPAC Test | **Pull-out**

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CHANGE, SOUND, AND HEAT

This LIFEPAC® is a review of the information you have studied in science during this school year. To review something means to go over again things you have already studied. This LIFEPAC will help you remember the important things you learned. The things you learn and remember will help you in your future science studies. This review will help you understand more about God's wonderful creation.

Objectives

Read these objectives. The objectives tell you what you should be able to do when you have finished this LIFEPAC.

1. Name five things important to a healthy body.
2. Tell three ways you are different from an animal.
3. Draw and label three parts of a plant.
4. Name five things plants need to grow.
5. Name four things that can change an environment.
6. Name the two main groups of animals.
7. Put the growth stages of an insect in correct order.
8. Tell what matter is.
9. Name three states of matter.
10. Tell what causes the four seasons of the year.
11. Tell what causes day and night.
12. Name the three major groups of rocks.
13. List seven forces that change rocks.

1. PHYSICAL CHANGE

God's creation is constantly changing. 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 of the LIFEPAK will review some of the ways that plants, animals, and people change.

Vocabulary

Study these new words. Learning the meanings of these words is a good study habit and will improve your understanding of this LIFE PAC.

appropriately (ə prō' prē ĭt lē). Proper, suitable or fitting for a particular purpose.

carbon dioxide (kär' bən dī ōk' sīd). The gas exhaled from the lungs.

chlorophyll (klôr' ə fīl). Green coloring material in plants.

conscience (kŏn' shəns). A sense of right and wrong.

creative (krē ā' tīv). Being inventive; able to create.

dissolve (diz olv'). To break apart or melt.

environment (ĕn vī' rən mənt). Everything that surrounds us.

invertebrates (ĭn vûr' tə brīts). Animals with no backbones.

maggot (măg' ət). The larva of a fly.

mineral (mĭn' ər əl). A natural substance found in the earth; necessary in small amounts to keep living things healthy.

multiply (mŭl' tə plī). To increase in number.

nostril (nŏs' trəl). The openings in the nose.

survive (sər vīv'). To remain alive; to live longer.

trachea (trā' kē ə). The tube that carries air to the lungs.

vertebrates (vûr' tə brīts). Animals that have backbones.

Note: All vocabulary words in this LIFE PAC appear in **boldface** print the first time they are used. If you are unsure of the meaning when you are reading, study the definitions given.

Pronunciation Key: hat, āge, cāre, fār; let, ēqual, tĕrm; it, ĭce; hot, ōpen, ôrder; oil; out; cup, pŭt, rŭle; child; long; thin; /ʦH/ for then; /zh/ for measure; /u/ or /ə/ represents /a/ in about, /e/ in taken, /i/ in pencil, /o/ in lemon, and /u/ in circus.

Ask your teacher to say these words with you.



Teacher check:

Initials _____ Date _____

Change in People

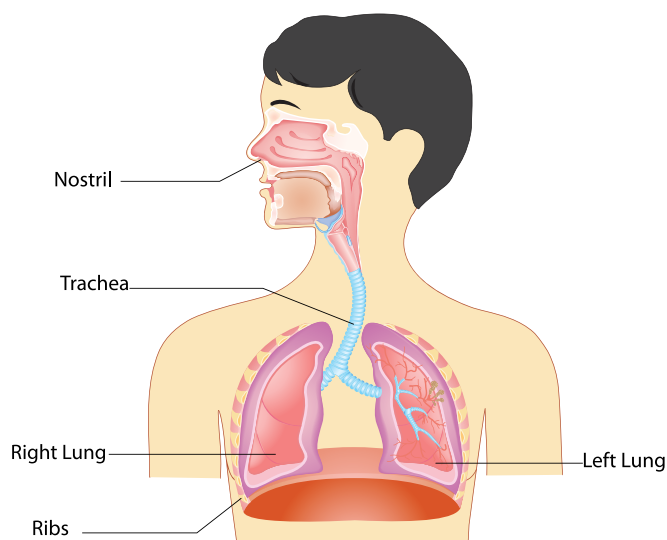
Some of the important things we need to live are air, food, water, exercise, and rest. What we remember about these five things will make a big difference in how we live and change.

Air. Air is needed for human 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 **trachea**. The trachea 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 trachea 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 gas.



| The Respiratory System

Food. The food you eat is very important to your health. You have a choice to make each day about the kind of food you eat. The choice is to eat good food or to eat food that is not good for you. The good food is food from the five food groups. The five food groups are:

(1) **Grains Group** includes all foods made from wheat, rice, oats, cornmeal, and barley. These foods include bread, pasta, oatmeal, breakfast cereals, tortillas, and grits.

(2) **Vegetables Group** includes all fresh, frozen, canned, and dried vegetables and vegetable juices.

(3) **Fruits Group** includes all fresh, frozen, canned, and dried fruits and fruit juices.

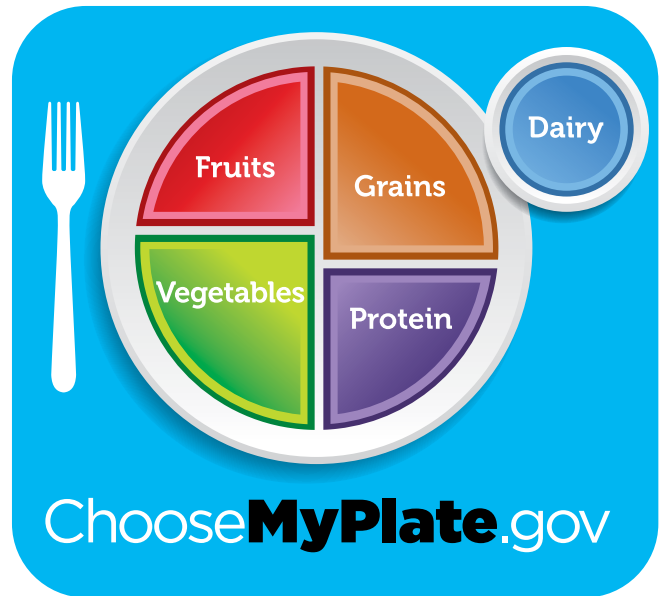
(4) **Dairy Group** includes all fluid milk products and foods made from milk that retain their calcium content, such as yogurt and cheese.

(5) **Protein** includes lean meat, poultry, fish, eggs, peanut butter, beans, and nuts or seeds.

Food eaten every day from each of these groups will make your body healthy.

Food like candy, gum, cookies, and soda pop are called “junk foods.” Junk foods are not needed by your body and can harm it. Try to make a good choice to eat healthy food instead of junk food each day.

Water. You also need to drink plenty of water each day to stay healthy. The human body consists largely of water. About one-half to three-fourths of a person’s body weight comes from water. A person might live without food for several weeks, but he can go without water for only about one week.



| For more detailed information, go to www.ChooseMyPlate.gov.



| Make sure to eat healthy foods and drink plenty of water.

The body needs water to carry out all of its life processes. Water helps **dissolve** food so that it can be carried to other parts of the body. Water also helps carry away waste products from the body. Finally, water helps the body to cool itself.

Exercise. Exercise is 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 healthy.

Rest. To take care of your body, you must also give it rest. You cannot exercise all the time. Rest and sleep are 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 five food groups plus other important things that need to be included for a healthy diet. Beside each group, write the name of a food from that group.

Food Group	Food
a. _____	_____
b. _____	_____
c. _____	_____
d. _____	_____
e. _____	_____
f. plus _____	_____



Make a list.

1.2 Write five important things for a healthy body.

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



Complete these sentences using these words.

air	trachea	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 product that we breathe out is called _____
_____ .



Teacher check:

Initials _____ Date _____

God gave life to all people. He also gave life to all plants and animals. God made plants, animals, and people so that they would change. For example, they grow and develop. God also made them different from each other. People differ from plants and animals in three ways:

- (1) People have a **conscience** to know right from wrong.
- (2) People have a spirit that lives forever.
- (3) People have a mind to think and be **creative**.

God created people to be special. Each living person has a conscience. God gave you a conscience to help you know what is right and what is wrong. Your conscience helps you decide what to do and how to behave. Animals do not have a conscience. They behave by instinct. God wants people to

use their conscience to do good and avoid evil. God will help you do the good and right thing if you pray to Him, read His Word in the Bible, and act according to your conscience.

God also gave you a spirit. Your spirit will live on forever. Animals and plants do not have a spirit that will live forever.

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, art, or books. Animals or plants cannot create things.

God wants us to use our minds for His Glory and for the good of others. We should also use our minds to think about good things. The Bible tells us (Philippians 4:8) to think about things that are true, honest, just, pure, lovely, and of a good report.



| God gave you a special mind to learn new things.



Write the word in the blank that completes each sentence.

- 1.9** Animals behave by _____ .
- 1.10** Your mind helps you to be _____ .
- 1.11** An animal cannot _____ things.
- 1.12** We know right from wrong by our _____ .
- 1.13** God wants people to use their consciences to do a. _____
and avoid b. _____ .



Complete these activities.

- 1.14** Tell three ways you are different from an animal.
- a. _____

- b. _____

- c. _____



Find Philippians 4:8 in your Bible. Write the things you are to think on.

- 1.15** whatsoever things are
- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. _____

SELF TEST 1

Each answer = 1 point

Find the names of the five food groups.

1.01 Put a ring around each group.

- a. CFRUITSBNPVEGETABLESZ
- b. DXFJLMIDAIRYLSNADAFTS
- c. NAMCEGRAINSPQLIMSTWXR
- d. MJMTHMEPROTEINANSMVDY

1.02 Write the names of the five food groups plus the other important things that you are supposed to eat on the lines.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____
- f. plus _____

Write three ways you are different from an animal.

1.03 A person has a _____ .

1.04 A person has a _____ .

1.05 A person can be _____ .

Draw a plant.

1.06 Draw a plant in the space below and label the roots, stem, and leaves (3 points).



Make a list.

1.07 List five things that a plant needs to grow.

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

Describe metamorphosis.

1.08 Put these words in their correct order.

adult larva egg pupa

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

Write / before each invertebrate (without a backbone) and write V before each vertebrate (with a backbone).

1.09 _____ reptiles

1.010 _____ starfish

1.011 _____ mammals

1.012 _____ butterfly

1.013 _____ amphibians

1.014 _____ fish

1.015 _____ moth

1.016 _____ clam

1.017 _____ birds

1.018 _____ crab

Make a list.

1.019 What five things are needed for a healthy body?

a. _____

b. _____

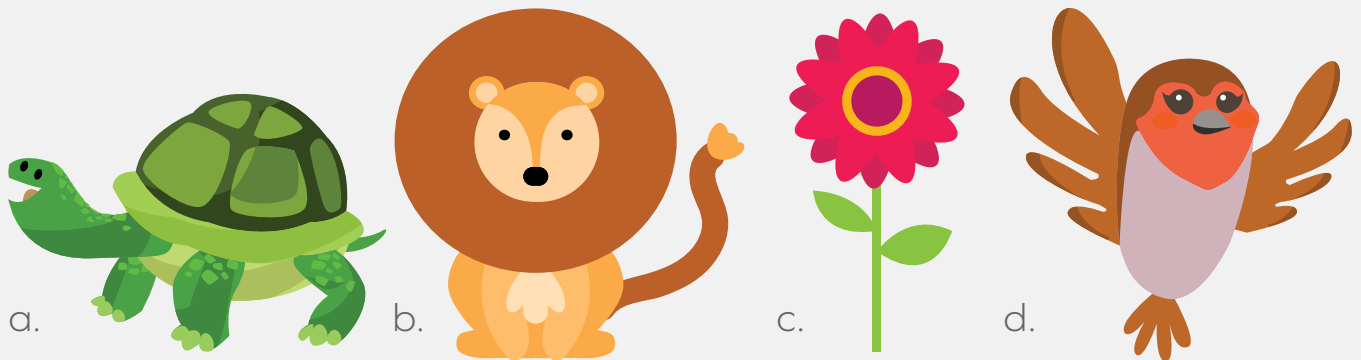
c. _____

d. _____

e. _____

Complete this activity.

1.020 Draw a circle around the picture that is different from the others.

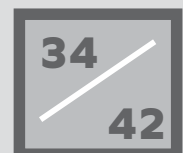


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