301

LIFEPAC GOLD

SCIENCE

YOU GROW AND CHANGE

Hello! In this LIFEPAC you are going to learn about your body. God shows His love by giving you a body that lives and grows in a wonderful way. You will learn how your body **digests** food. You will find out how you **breathe**. You will read about exercise and rest. You will learn how you are the same as an animal and how you are different. You will learn how to measure your growth.

Objectives

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

1. You will be able to tell how your body breathes air.
2. You will be able to tell how your body digests food.
3. You will be able to tell why exercise is important to your body.
4. You will be able to tell why rest is important to your body.
5. You will be able to tell how you are different from an animal.

My name is _____

backbone (back bone). The main bone along the middle of the back of humans and most animals.

blood. The red liquid inside the body.

brain. The organ inside the head used for learning, thinking, and remembering.

breathe. To force air in and out of the lungs.

carbon dioxide (car bon di ox ide). The gas exhaled from the lungs.

cocoa (co coa). A powder that tastes like chocolate.

conscience (con science). Sense of right and wrong.

create (cre ate). To make for the first time.

creative (cre a tive). To be able to make something new.

diaphragm (di a phragm). A muscle between the chest and stomach used for breathing.

digest (di gest). To change food so the body can use it.

digestion (di ges tion). The body changing food for its use.

dissolve (dis solve). To make a solid into a liquid.

exhale (ex hale). To breathe out.

funnel (fun nel). A tool for pouring into a small opening.

gland. An organ in the body that makes and gives out some liquid.

heart. The organ in the body that pumps the blood.

inhale (in hale). To breathe in.

instinct (in stinct). A way of acting that is born in a human or animal instead of being learned.

joint. The place where two things are joined together.

large intestine (large in tes tine). An organ in the body where digestion is finished.

lungs. The organ in the body that takes in air while breathing.

mixture (mix ture). Two or more things together.

muscle (mus cle). Tissues in the body that help the body move.

nitrogen (ni tro gen). A gas that is part of the air you breathe.

nostrils (nos trils). The openings in the nose.

oxygen (ox y gen). A gas that is part of the air you breathe.

pulse. The beating caused by the heart pumping blood.

rib. One of the curved bones that goes from the backbone to the front of the body.

saliva (sa li va). The liquid that glands make to keep the mouth wet.

salivary glands (sa li var y glands). The glands that make saliva.

scientist (sci en tist). A person who studies science.

skeleton (skel e ton). The bones of the body fitted together.

skull. The bones in the head.

small intestine (small in tes tine). An organ in the body where digestion takes place.

spinal cord (spi nal cord). The cord of nerve tissue in the backbone.

stir. To mix.

stomach (stom ach). The organ in the body that first receives food for digestion.

system (sys tem). A way to do something.

towel (tow el). A piece of cloth or paper for drying.

tube. A pipe-shaped object.

windpipe (wind pipe). The place where air is carried from the throat to the lungs.

These words will appear in **boldface** (darker print) the first time they are used.

I. YOUR BODY BREATHES AIR

Did you know that you are living on the bottom of an ocean of air? Air is made up of gases. Air is mostly **oxygen** and **nitrogen.**

Air was **created** by God on the second day. God spoke and caused the air to surround the world. God knew that all the living things that He was going to create would need air. God made it possible for each living thing to be able to breathe air.

blood		The red liquid inside the body.
breathe		To force air in and out of the lungs.
carbon dioxide	(car bon di ox ide)	The gas exhaled from the lungs.
create	(cre ate)	To make for the first time.
digest	(di gest)	To change food so the body can use it.

exhale	(ex hale)	To breathe out.
inhale	(in hale)	To breathe in.
lung		The organ in the body that takes in air while breathing.
nitrogen	(ni tro gen)	A gas that is part of the air you breathe.
nostrils	(nos trils)	The openings in the nose.
oxygen	(ox y gen)	A gas that is part of the air you breathe.
scientist	(sci en tist)	A person who studies science.
tube		A pipe-shaped object.
windpipe	(wind pipe)	The place where air is carried from the throat to the lungs.

PEOPLE

Joseph Priestley

Ask your teacher to say these words with you.
Teacher check _____
Initial Date

THE AIR COMES INTO YOUR BODY

How do you breathe air? Close your mouth and take in air through your **nostrils.**

When you take in air, you **inhale**.

When you let the air back out, you **exhale.**

When you are inhaling and exhaling, you are breathing.

You inhale to breathe in oxygen. Your body must have oxygen. Inhaling is the way your body gets oxygen from the air.

When you exhale, you get rid of **carbon dioxide.** Too much carbon dioxide in your body is harmful.

Try this!

You will need this thing:
a clock with a second hand (your school wall clock probably has a second hand).

Follow these directions. Put a check in the box when you do each step.

- ☐ 1. Watch the clock and count the times you breathe in one minute.
- ☐ 2. Write down the number of times you breathed in one minute.
- ☐ 3. Run in place for thirty seconds.
- ☐ 4. Watch the clock and count the times you breathed in one minute.
- ☐ 5. Write down the number of times you breathed in one minute.

Did you breathe more times in a minute after you ran in place?

☐ yes ☐ no

When you were running in place, your body was using up its oxygen faster. When you stopped running, you had to breathe more often to get oxygen back in your body.

Answer the questions. Use complete sentences.

1.1 Why do you think people say that someone is "out of breath" after the person has been running or exercising?

_____

_____

_____

1.2 Your body needs to breathe in oxygen. Why do you think it is hard on you and harmful to hold your breath for too long a time?

_____

_____

_____

THE AIR GOES TO THE LUNGS

It is important to breathe in through your nostrils. Inside your nostrils many tiny hairs grow. These little hairs help keep dust and

germs out of your body.

Under the skin inside your nose are many tiny **tubes** that carry warm **blood** through your nose. As the air goes over these warm tubes, it is heated.

Then the air travels down a tube called the **windpipe.** The air goes into your **lungs.** Your body has two lungs.

The lungs take the oxygen from the air you breathe. The oxygen goes from the lungs into the blood. The blood takes the oxygen to all parts of your body.

When you were born, your mother listened carefully to hear your first cry. How happy she was to hear it! Do you know why? When you cried, she knew that your lungs had opened up to take in air. You could breathe for yourself!

You will always have air in your lungs. Even when you exhale, or breathe out, you will have air in your lungs. Without air in your lungs you would not live.

Take a deep breath. Close your mouth and take in air through your nose. Now let the air come out of your lungs.

Write the answer in the blank using the correct word. Use the following words.

air	hairs	warm
blood	lungs	windpipe

1.3 No living thing can live without _____.

1.4 God made you so that you could use His gift of air by giving you a nose, windpipe, and _____.

1.5 You should breathe through your nostrils so that the little _____ in the nostrils will keep dust and germs from going into the lungs.

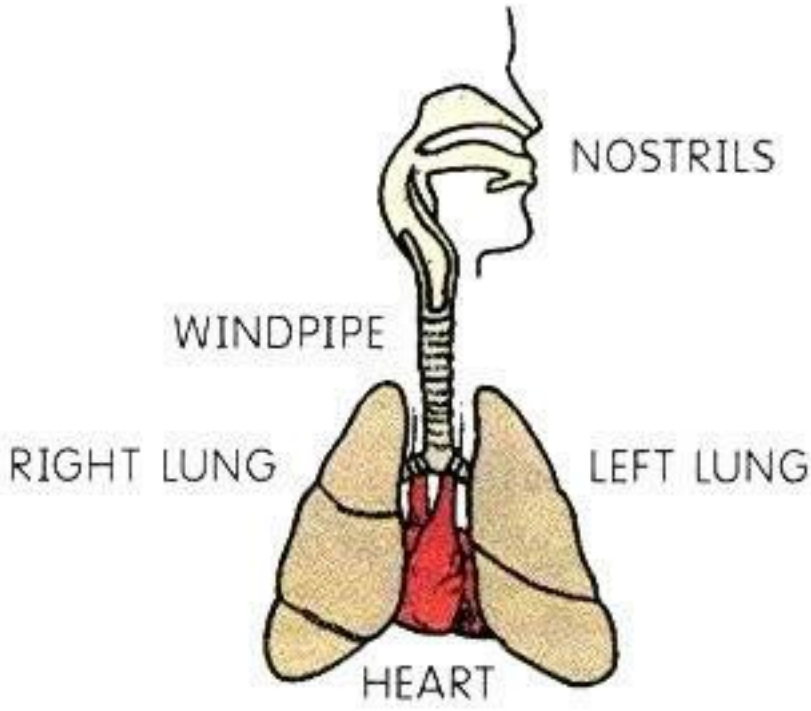
1.6 The oxygen from the air in your lungs is picked up and carried to all parts of the body by the _____.

1.7 The many tiny tubes carrying blood through the inside of your nose _____ the air before it goes into your lungs.

1.8 The tube that carries air into your lungs is called the _____.

Study the picture.

1.9 Write the words from the picture that go in the blanks.



a. The openings in your nose shown in the picture are called _____.

b. The tube that goes to your lungs is the _____.

c. How many lungs do you have? _____.

Breathe in and out through your nostrils again. Do you think it is easy? Even in your sleep you breathe. Your body keeps on working all the time. Inside of you many parts of your body work together to keep you well and make you grow.

Try this!

You will need this thing:
a sponge

Follow these directions. Put a check in the box when you do each step.

- ☐ 1. Take a sponge.
- ☐ 2. Close your hand.
- ☐ 3. Open your hand.

Answer the questions.

1.10 What happened when you closed your hand around the sponge?_____

1.11 What happened when you opened the hand that held the sponge?_____

1.12 Did air fill the sponge?_____

Follow these directions. Put a check in the box when you do each step.

- ☐ 1. Put your hands on your chest with your fingers touching.
- ☐ 2. Breathe in deeply.

Answer these questions.

1.13 When you breathed in, did your fingers move apart?_____

1.14 Why do you think they moved?_____

_____

_____

1.15 Did air fill your lungs?_____

THE BODY NEEDS OXYGEN

Joseph Priestley was a **scientist.** Joseph Priestley discovered oxygen. He put a lighted candle in a glass jar. He covered the jar. The flame of the candle went out.

Next, he put a mouse in a jar with a lighted candle. He covered the jar. The candle flame went out, and the mouse died.

The scientist thought, "The candle and the mouse needed the same gas."

"What spoiled the air?" he wondered.

He tried something else. He placed a small growing plant in a glass jar. He covered the jar. After ten days, the plant was still alive!

Next, Joseph Priestley put a mouse in with the plant and covered the jar. Both the mouse and the plant stayed alive!

He had to be sure. He took the plant from the jar and left the mouse. The mouse died. His thoughts were right.

The animals and the lighted candle both needed the same gas. What was that gas? It was oxygen.

In your studies about plants, you learned that plants gave off oxygen. The mouse needed oxygen from the plant.

You may ask, "Would it be better if all the air were oxygen?"

Another scientist did an experiment. He put a live mouse in the bottom of a bottle of pure oxygen. Do you know what happened?

It made the mouse so lively that he soon was tired.

You need nitrogen in the air to make the oxygen weaker.

Answer each statement yes **or** no.

1.16 All living creatures need oxygen._____

1.17 It is better to breathe through your mouth._____

1.18 The blood is always moving to all parts of the body._____

1.19 Joseph Priestley found out about oxygen._____

1.20 Your lungs are something like a sponge. _____

THE BODY GIVES OFF CARBON DIOXIDE

Your blood is always moving. The blood takes oxygen to all parts of your body. When the blood takes the air back to the lungs, the air has changed. There is a lot more carbon dioxide in that air. This air goes from the lungs to the windpipe. It goes up the windpipe and out through the nostrils. We breathe out carbon dioxide.

Write the answers to the questions. Use good sentences.

1.21 What does inhale mean?_____

_____

1.22 What does exhale mean? _____

_____

1.23 What gas is taken from air that is inhaled? _____

_____

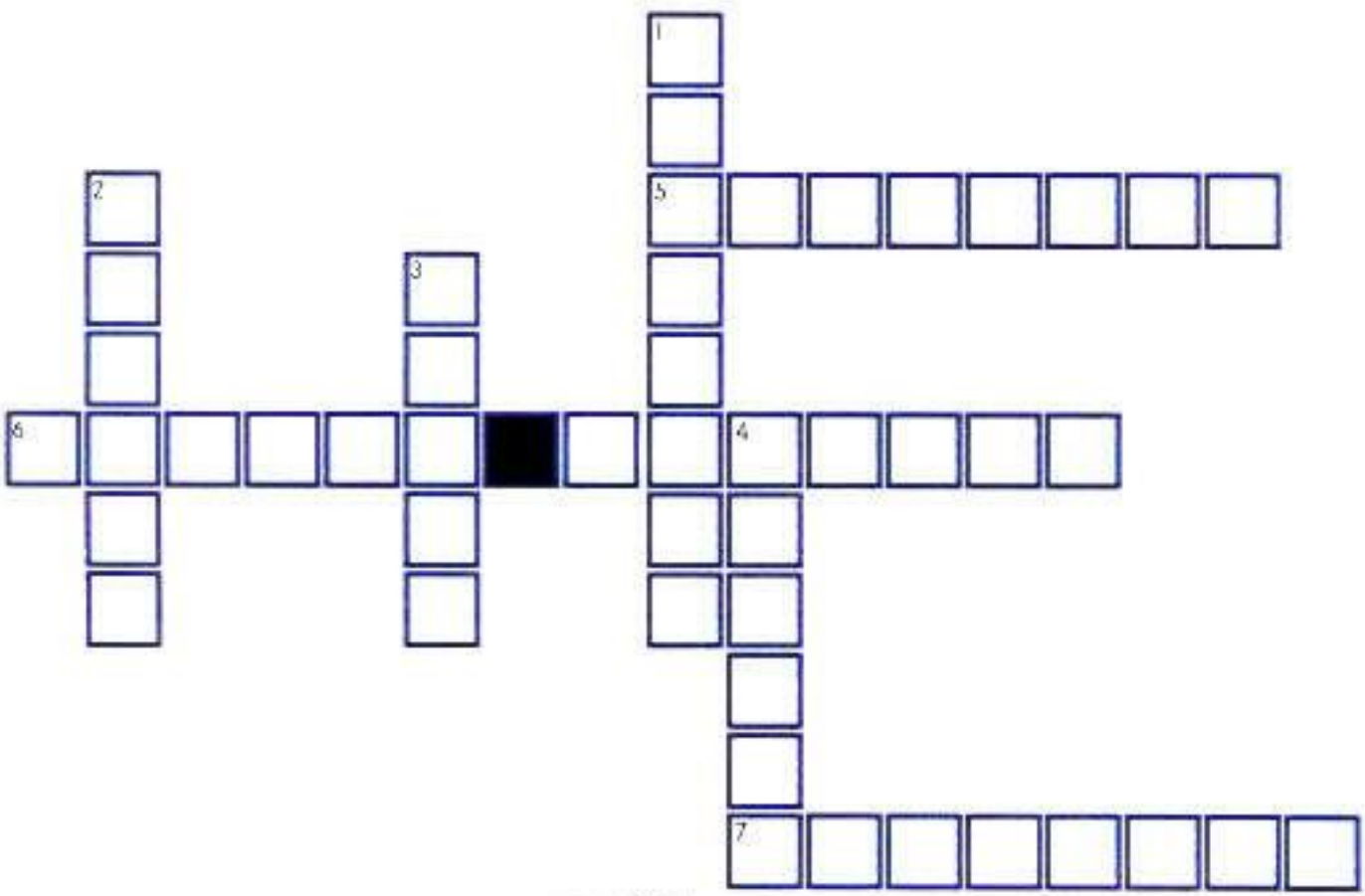
1.24 What gas is exhaled? _____

_____

Complete the puzzle.

1.25 Finish the puzzle by using the words in the box. Use the puzzle clues on page 16.

lungs	carbon dioxide
oxygen	nostrils
nitrogen	create
windpipe	



Down

1. The tube that carries oxygen to the lungs
2. To make
3. The part of our body that takes in oxygen and gives out carbon dioxide
4. The gas that our lungs take from the air

Across

5. The gas that is mixed with oxygen in the air we breathe
6. The air we breathe out from our lungs
7. Openings in the nose

Teacher check _____
Initial Date

For this Self Test, study what you have read and done. The Self Test will check what you remember.

SELF TEST 1

Fill in the circle in front of the answer that best finishes the sentence.

1.01 The part of the body that takes in oxygen and gives out carbon dioxide is the _____.

○ foot ○ lungs ○ eyes

1.02 The gas that the lungs take from the air is _____.

○ oxygen ○ carbon dioxide ○ nitrogen

1.03 The gas that is breathed out of the lungs is _____.

○ oxygen ○ carbon dioxide ○ nitrogen

1.04 The small amount of gas that is mixed with oxygen in breathing is _____.

○ oxygen ○ carbon dioxide ○ nitrogen

1.05 The openings in the nose are _____.

○ holes ○ nose holes ○ nostrils

1.06 The tube that carries the carbon dioxide from the lungs out through the nostrils is the _____.

○ airtube ○ windpipe ○ gaspipe

1.07 The man who found out about oxygen was _____.

○ Jacob ○ Joseph ○ Jose

Ministerly Priestly Pastorly

1.08 Blood takes oxygen to all parts of the _____.

○ body ○ toe ○ house

1.09 All living things need _____.

○ a new car ○ to study ○ oxygen

1.010 It is better to breathe through the _____.

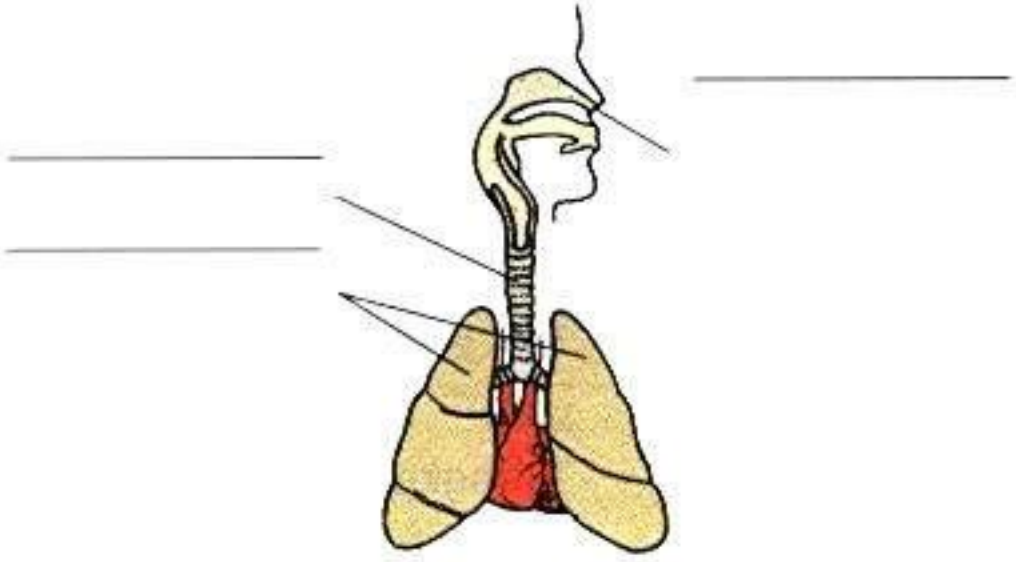
○ mouth ○ skin ○ nose

Match the words.

1.011	hairs	number of lungs
1.012	inhale	man who studies life
1.013	exhale	breathing in
1.014	warm	air becomes this before going into lungs
1.015	two	breathing out
1.016	sponge	lungs are like this
1.017	scientist	cleans the air in nose

Write the names of the body parts that are marked.

1.018



Teacher check _____

Initial Date

16/20

My Score

II. YOUR BODY DIGESTS FOOD

People in different parts of the earth eat different kinds of food. No matter what people eat, they are still like you. People all over the world grow. All people need food to make them grow.

How does the food you eat turn into the things that your body needs to make you grow big and strong?

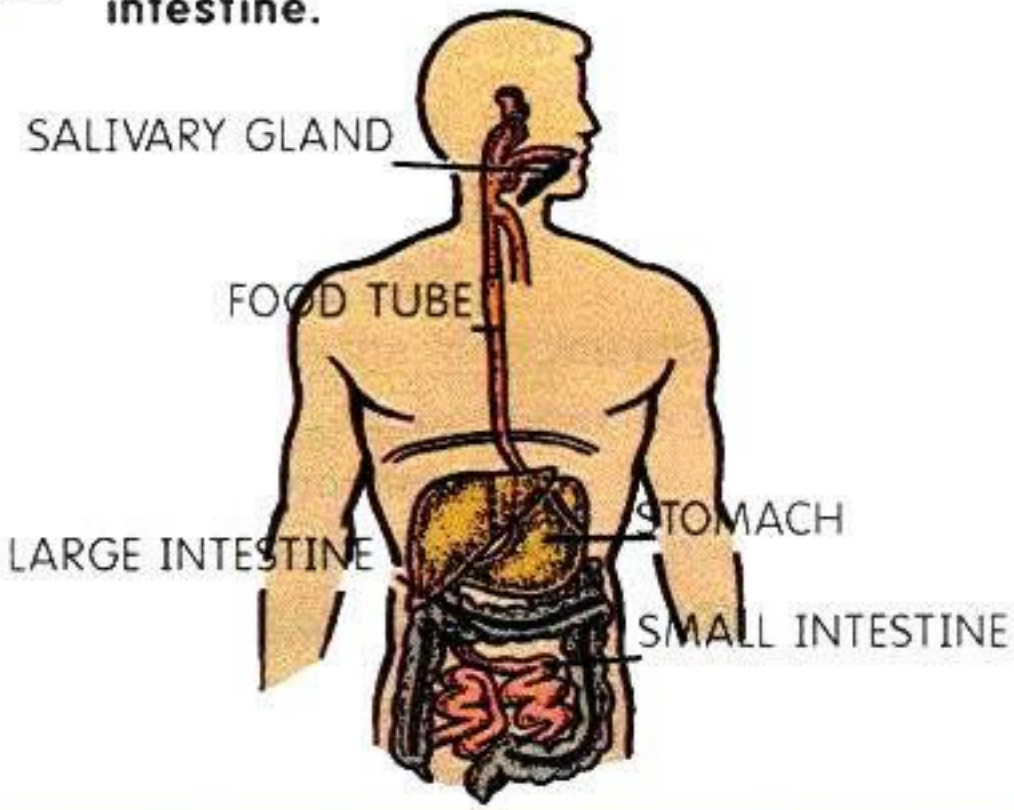
God has created your body so that it is able to digest and use the food you eat.

cocoa	(co coa)	A powder that tastes like chocolate.
digestion	(di ges tion)	The body changing food for its use.
dissolve	(dis solve)	To make a solid into a liquid.
funnel	(fun nel)	A tool for pouring into a small opening.
gland		An organ in the body that makes and gives out some liquid.
large intestine	(large in tes tine)	An organ in the body where digestion is finished.

mixture	(mix ture)	Two or more things together.
muscle	(mus cle)	Tissues in the body that help the body move.
saliva	(sa li va)	The liquid that glands make to keep the mouth wet.
salivary glands	(sa li var y glands)	The glands that make saliva.
small intestine	(small in tes tine)	An organ in the body where digestion takes place.
stir		To mix.
stomach	(stom ach)	The organ in the body that first receives food for digestion.
towel	(tow el)	A piece of cloth or paper for drying.

Ask your teacher to say these words with you.
Teacher check _____
Initial Date

Study the picture. Find the **salivary gland**, the **stomach,** the **small intestine,** and the **large intestine.**



FOOD COMES INTO THE MOUTH

Think what it would be like if you went home after school and the smell of fresh cookies reached your nostrils. Would your mouth water?

That water-like matter is called **saliva.** Saliva comes from **glands** inside your mouth. These glands (salivary glands) are on each side of your cheek and under your tongue.

When you start to chew a cookie, the saliva makes your cookie soft. Your tongue throws the cookie around, mixing it with the saliva. You are beginning to digest your cookie.

When the cookie is soft enough, your tongue throws the cookie to the back of your mouth. A little door closes off the windpipe so that the food will not go into your windpipe.

Write the answers to the questions. Use good sentences.

2.1 What happens to food in the mouth? _____

_____

2.2 What does saliva do to something that is eaten?

_____

_____

2.3 What keeps the food from going into the lungs?

_____

_____

FOOD GOES TO THE STOMACH

The food goes down a long tube to your stomach. On the inside of your stomach are some very strong **muscles.** These strong muscles break up the food for several hours. The stomach breaks up the food until it gets soupy.

The stomach then pushes the food into the small intestine. The small intestine is a long, curly tube about three times the length of your body. More **digestion** takes place here.

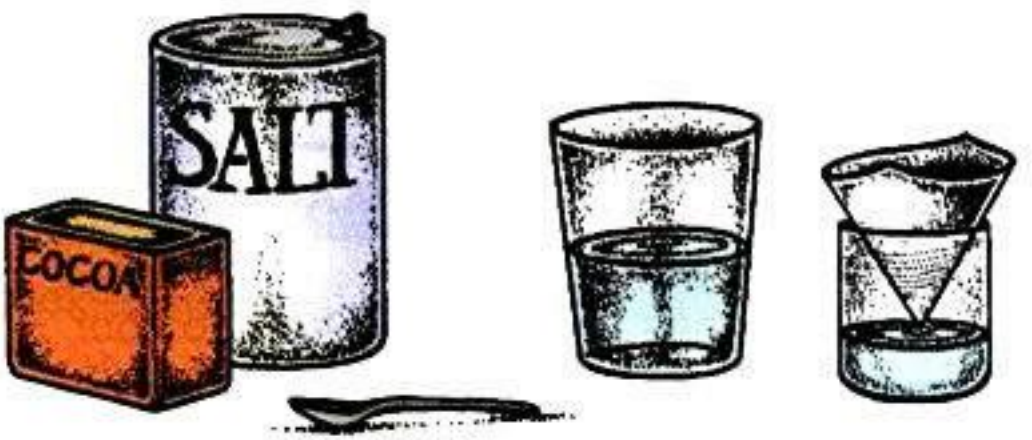
Match the words. Draw a line to the right answer.

2.4	stomach	changing food for body use
2.5	muscles	food is broken up
2.6	small intestine	very strong
2.7	digestion	more digestion

Complete this experiment.

You will need these things:

cocoa	salt
a paper **towel**	teaspoon
a small drinking glass	
a large drinking glass half full of water	



Follow these directions. Put a check in the box when you do each step.

- ☐ 1. Cut a piece of paper towel about eight inches long and four inches wide.
- ☐ 2. Fold it so that it forms a **funnel** with no hole in the bottom.

- [ ] 3. Place it, with the point down, in a small glass.
- [ ] 4. Pour a teaspoon of salt into the large glass of water.
- [ ] 5. **Stir** it until the salt is completely **dissolved.**
- [ ] 6. Pour a teaspoon of cocoa into the same large glass.
- [ ] 7. Stir until the **mixture** is brown.
- [ ] 8. Slowly, pour the brown mixture of cocoa and salt into the paper in the little glass.
- [ ] 9. Taste the water that comes through. It tastes like _____.

2.8 Write what you have discovered._____

_____

_____

You should find that the water that came through tastes very salty. There should be almost no taste of cocoa. There should be no cocoa color in the water that came through. This experiment should tell you that the salt came right through the paper, but most of the cocoa was held back. Some things pass easily through paper, but others are held back.

FOOD IS READY FOR THE BODY

The same sort of thing happens in your intestine. Food that is ready for the body can pass through the walls of the small intestine. The rest of the food is held back until it is ready to go to the blood, or is pushed out of the body as waste.

The blood takes the food to muscles, bones, and other parts of your body. The food makes your body strong to work, run, and play. It keeps you growing and changing.

The food which the body cannot use is pushed into the large intestine and out of your body.

Answer the questions. Use good sentences.

2.9 What takes the food to all parts of the body?_____

_____

2.10 What becomes of the food that the body cannot use?_____

_____

2.11 What happens in the small intestine? _____

_____

_____

2.03 The body inhales _____.

2.04 The openings in the nose are called _____.

2.05 The tube that carries oxygen to the lungs is the _____.

2.06 The food that the body does not need goes out as _____.

2.07 The part of the body that is used in breathing is _____.

2.08 The tongue is in the _____.

2.09 Digestion happens in the stomach and _____ intestine.

2.010 Food is taken to body parts by the _____.

Number the places in the body in the order in which food travels to them.

2.011 _____ large intestine

2.012 _____ stomach

2.013 _____ mouth

2.014 _____ small intestine

2.015 _____ food tube

Number the places in the body in the order in which air travels to them.

2.016 _____ windpipe

2.017 _____ nostrils

2.018 _____ lungs

Write the answers to the questions. Use good sentences.

2.019 Who found out about oxygen? _____

_____

2.020 What is it called when food is eaten and changed to be used by the body? _____

_____

Teacher check _____

Initial Date

16/20

III. YOUR BODY EXERCISES AND RESTS

You have learned how God has shown that He cares for you by giving you fresh air, good food, and water. God has given you a breathing **system** and a digestive system. These systems make it possible for your body to breathe fresh air and digest food and water. God wants you to keep your body strong and well. When you exercise, you are taking care of the body systems God has given you.

backbone (back bone) The main bone along the middle of the back of humans and most animals.

diaphragm	(di a phragm)	A muscle between the chest and stomach used for breathing.
heart		The organ in the body that pumps the blood.
joint		The place where two things are joined together.
pulse		The beating caused by the heart pumping blood.
rib		One of the curved bones that goes from the backbone to the front of the body.
skeleton	(skel e ton)	The bones of the body fitted together.
skull		The bones in the head.
spinal cord	(spi nal cord)	The cord of nerve tissue in the backbone.
system	(sys tem)	A way to do something.

Ask your teacher to say these words with you.
Teacher check _____
Initial Date

THE MUSCLES WORK HARD

In order to exercise, you need muscles! The muscles are made up of many thread-like strings tied together. The main part of the muscle stretches like a rubber band.

Muscles give your body shape. Some muscles move your bones. Your bones are covered with more than 600 muscles.

A muscle you use when you breathe is called the **diaphragm.** The diaphragm is between your chest and stomach. The diaphragm moves your rib cage as you inhale and exhale.

The **heart** is also a muscle. The heart pumps the blood through your body. When you exercise, your heart pumps blood faster through your body. More oxygen, food, and water go to all parts of your body. When you have more oxygen in your blood, you have more power.

Try this!

Follow these directions. Put a check in the box when you do each step.

- ☐ 1. Bend your arm until your hand touches your shoulder.
- ☐ 2. Feel the muscle in your upper arm.

The muscle you feel is the muscle that pulls up your lower arm. It is a lifting muscle. The more powerful it is, the more you can lift.

Do this activity.

3.1 Name five things you need to keep your body growing and changing.

a. _____

b. _____

c. _____

d. _____

e. _____

Complete the following sentences.

3.2 Exercise makes your heart beat _____.

3.3 When the heart beats faster, the blood _____ faster through your body.

3.4 Exercise makes you breathe _____.

3.5 When you breathe faster, more _____ goes to your lungs.

3.6 Your blood delivers more _____, _____, and _____ to every part of your body.

3.7 Muscles get stronger when you _____.

Try this!

Where you feel your blood being pushed by the heart is called the **pulse.** Feeling your pulse is called taking your pulse. Find out how fast your heart is beating every minute. Follow these steps to take your pulse.

Follow these directions. Put a check in the box when you do each step.

1. Put one of your hands on your other wrist.
2. Gently move your hand around on the wrist until you feel a slight beating in your blood vessel.
3. Count the number of times you feel the beating in one minute.
4. Write the number in the space below.

_____

Do this activity.

3.8 Now that you know how to take a pulse, you will be able to take the pulses of some of your friends and perhaps your teacher in order to fill out the following chart.

	after sitting	after jumping
one friend's pulse		
another friend's pulse		
your teacher's pulse		
your pulse		

Is everyone's pulse beating the same number of times a minute? _____

Teacher check _____

Initial Date

Study your words.

3.9 Look at the word hop. Hop ends with the letter p. Is the letter p a vowel or a consonant?

_____

3.10 The letter p is a consonant. The word hop ends with a consonant.
What kind of a letter, a vowel or a consonant, comes before the letter p in the word hop?

_____

O comes before the letter p. The letter o is a vowel.

When a word ends with a single consonant letter which follows a single vowel, you double the consonant before adding -ing, or -ed.

Fill in the chart.

3.11 Adding -ing to each word. The first one is done for you.

run	running		
dig	_____	skip	_____
flop	_____	hug	_____
grab	_____	swim	_____

Each of these words tells an action you could do to exercise. You use muscles when you run, dig, flop, grab, skip, hug, or swim.

Do these activities.

3.12 Write a sentence using each of the words that ends in -ing.

_____

_____

_____

_____

_____

_____

3.13 Make a list of things that you like to do that will give you exercise.

a. _____ d. _____

b. _____ e. _____

c. _____ f. _____

3.14 Many times you can be helping at the same time that you are exercising. Put a check beside each item below that you do to help at home.

- ☐ Wash floors
- ☐ Clean windows
- ☐ Pull weeds
- ☐ Walk the dog
- ☐ Dust and sweep

Think of more ways that you can exercise at home. Helping people and getting exercise at the same time can make you happy.

THE BONES ARE IMPORTANT

Your body has 206 bones. All the bones fit together to make the **skeleton** of your body. The skeleton makes a strong frame which holds up your weight. Your bones fit together at **joints.**

Where a joint is, you can bend your body. Count the number of places you can bend. _____ If you bend in that many places, then you must have _____joints.

In your chest are bones called **ribs.** The ribs form the rib cage which protects the lungs and heart.

The **backbone** supports your whole body. The **spinal cord** is in your backbone. The spinal cord runs from your brain down the center of the backbone. The spinal cord carries messages from the brain to all parts of your body. The spinal cord lets the brain know when the body is feeling pain, heat, and cold. The spinal cord is very soft. The spinal cord can be easily hurt. The backbone protects the spinal cord.

Something to think about.

3.15 In your head are many bones called the **skull.** What are these bones protecting?_____

3.16 Do bones grow?_____

(Hint: Are your bones the same length that they were when you were a baby?)

Answer yes **or** no **to the questions.**

3.17 _____ Is the heart a muscle?

3.18 _____ Do you have less than 100 muscles?

3.19 _____ Is the diaphragm used when you breathe?

3.20 _____ Do you need more oxygen when you exercise?

3.21 _____ Are muscles like rubber bands?

3.22 _____ Is the muscle's job to give shape and to move the bones?

THE BODY RESTS

To take care of your body, you also need to rest. You need at least eleven hours of sleep each night. An older person needs only eight hours. You are still growing. You will help yourself grow strong if you go to bed early.

Match the words to the meanings.

3.23	skull	supports whole body
3.24	spinal cord	where two bones meet
3.25	backbone	206
3.26	joint	needed for a strong body
3.27	number of bones	carries messages
3.28	rest	protects brain

Share this activity with a friend.

3.29 Feel the bones in your hand.
How many bones can you count in your hand?

_____

Feel the bones in your friend's hand.
How many bones can you count in your friend's hand?_____
Feel the bones in your foot.
How many bones can you count in your foot?_____
Feel the bones in your friend's foot.
How many bones can you count in your friend's foot?_____

Teacher check _____
Initial Date

Study what you have read and done for this Self Test. This Self Test will check what you remember of this part and other parts you have read.

SELF TEST 3

Write yes **or** no **on the line in front of each sentence.**

3.01 _____ Exercise makes the heart beat slower.

3.02 _____ Exercise makes a person breathe faster.

3.03 _____ When the heart beats faster, the blood moves slower.

3.04 _____ When you breathe in, you exhale.

3.05 _____ The teeth chew the food in the stomach.

3.06 _____ The openings in the nose are the nostrils.

3.07 _____ Saliva is in the large intestine.

3.08 _____ Exercise makes a strong body.

3.09 _____ The body does not need to rest.

3.010 _____ The body has over 600 bones.

Match the words.

3.011	skeleton	a.	inhale
3.012	saliva	b.	heart beat
3.013	diaphragm	c.	breathing muscle
3.014	heart	d.	takes food to body
3.015	pulse	e.	mouth
3.016	oxygen	f.	exhale
3.017	carbon dioxide	g.	pumping muscle
3.018	blood	h.	framework

Answer these questions in good sentences.

3.019 What is one thing that exercise does for your body? _____

_____

3.020 What happens to food in the mouth? _____

_____

3.021 What is the job of the heart? _____

_____

3.022 What is the job of the spinal cord? _____

_____

_____

3.023 What are two jobs that the bones do for the body?

_____

_____

3.024 What is digestion? _____

_____

_____

3.025 What is the pulse? _____

_____

_____

Teacher check _____
Initial Date

20/25

IV. YOUR BODY IS DIFFERENT FROM AN ANIMAL

You are different from an animal in the way you look, eat, dress, and live. God has given life to animals. God has given animals breathing systems so that the animals can live. God has given digestive systems to animals. Animals have bones and muscles. Both animals and people need food, air, and water to live.

In this section of your LIFEPAC, you will learn about some parts of your being and body that make you different from animals.

brain		The organ inside the head used for learning, thinking, and remembering.
conscience	(con science)	Sense of right and wrong.
creative	(cre a tive)	To be able to make something new.
instinct	(in stinct)	A way of acting that is born in a human or animal instead of being learned.

Ask your teacher to say these words with you.
Teacher check _____
Initial Date

YOUR CONSCIENCE

God created people in a special way. God gave to each living person a **conscience**. The conscience is a feeling inside that helps you know right from wrong. Your conscience was placed in you by God. People were created by God to listen to and to know what their consciences tell them.

Animals have no way of knowing right from wrong. Animals behave by **instinct.** They behave in ways they are born with without being taught. Animals do not have a conscience.

YOUR SPIRIT

God gave man something no one has ever seen. God gave to each person a spirit. Each person can talk to God by the spirit. An animal has no spirit. An animal cannot talk to God.

The er, ir, and ur make the same sound. Say the words represented by these pictures. Notice the sounds in each word.



Choose the word that best completes each sentence. Draw a circle around the word you choose.

4.1 Elsie said, "I like the _____ grade."
third turn

4.2 The dog is _____.
hurry thirsty

4.3 The cat is _____ the table.
under older

4.4 I went to _____ on Sunday.
church first

4.5 Mary found her _____.

serve purse

4.6 God has given you a _____.

spirit spill

YOUR MIND

The **brain** of a person is different from the brain of an animal. God gave people a brain. He gave us a mind with which to think.

Your mind helps you understand, feel, and choose. You are able to know and learn many things. You can learn much more than an animal.

Your mind helps you to be **creative.** An animal has never made a space ship or a rocket. An animal is not creative.

Be careful what you let come into your mind. Be careful what you see. Be careful what you hear. Be careful what you think of others. Be careful what you think of yourself.

God has given us a list of things to think about with our minds. Read the list in Philippians 4:8. Ask yourself these things about your thoughts. Check each question that helps you guard your mind.

☐ Are my thoughts true thoughts?

☐ Are my thoughts kind thoughts?

WATCHING MY BODY GROW AND CHANGE

Date	Height	Weight	Chest	Waist	Length of Feet

Write the answer in the blank in each sentence.

4.7 Animals behave by _____.

4.8 A person can talk to God by his _____.

4.9 God gave you a _____ with which to think.

4.10 Your mind helps you to be _____.

4.11 Your body is growing and _____.

4.12 You can _____ your growth.

Write the words in the right column.

4.13 Use these words to compare people with animals.

conscience	food	air
water	spirit	life
breathing system	bones	digestive system
mind	muscles	

Same as Animals	Different from Animals
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Teacher check _____

Initial Date

Study what you have read and done for this last Self Test. This Self Test will check what you remember in your studies of all parts in this LIFEPAC. The last Self Test will tell you what parts of the LIFEPAC you need to study again.

SELF TEST 4

Number the order that food travels through the body.

4.01	_____	small intestine
4.02	_____	stomach
4.03	_____	mouth
4.04	_____	large intestine
4.05	_____	food tube

Answer yes **or** no **to each question.**

4.06	_____	Does an animal have a conscience?
4.07	_____	Did God create the world?
4.08	_____	Does the skeleton move food in the body?
4.09	_____	Is the diaphragm used in breathing?
4.010	_____	Does an animal breathe in oxygen?
4.011	_____	Does exhale show the heart beat?
4.012	_____	Did Joseph Priestley find the spinal cord?
4.013	_____	Is an animal creative?
4.014	_____	Can you measure your growth?
4.015	_____	Are the openings in your toes your nostrils.

Name three ways that animals and people are the same.

4.016 _____

4.017 _____

4.018 _____

Name two ways that people are different from animals.

4.019 _____

4.020 _____

Teacher check _____

Initial Date

16/20

Before taking the LIFEPAC Test, you should do these self checks.

1. Did you do good work on your last Self Test?
2. Did you study again those parts of the LIFEPAC you didn't remember?

Check one: ☐ Yes (good)

☐ No (ask your teacher)

3. Do you know all the new words in "Vocabulary"?

Check one: ☐ Yes (good)

☐ No (ask your teacher)

SCIENCE

3 0 1

LIFEPAC TEST

22/27

Name _____

Date _____

Score _____

SCIENCE 301: LIFEPAC TEST

Match the words.

1.	saliva	man has
2.	nostrils	breathe in
3.	exhale	in mouth
4.	inhale	carries messages
5.	spinal cord	openings in nose
6.	conscience	breathe out

Number the places that food goes in the order of the digestive system.

7. _____ stomach
8. _____ large intestine
9. _____ mouth
10. _____ small intestine
11. _____ food tube

Fill in the circle in front of the right answer.

12. To make a strong body, you must _____.

○ eat too much ○ exercise ○ relax

13. The body inhales _____.

○ oxygen ○ water ○ carbon dioxide

14. The body exhales _____.

○ oxygen ○ smoke ○ carbon dioxide

15. The scientist who found out about oxygen was _____.

○ John Pride ○ Joseph Priestly ○ Jacob Poor

16. To know how fast the heart beats, you feel the _____.

○ pulse ○ purse ○ head

Name two ways people are different from animals.

17. _____.

18. _____.

Name three ways that animals and people are the same.

19. _____.

20. _____.

21. _____.

Fill in the circle in front of the right answer.

22. Blood takes oxygen to all parts of the _____.

○ fingers ○ toes ○ body

23. You feel the _____ to know how fast the heart beats.

○ nose ○ pulse ○ ear

24. Air in the nose is cleaned by _____.

○ air ○ hairs ○ food

25. When the heart beats faster, the blood moves _____.

○ slower ○ faster ○ at the same rate

26. The breathing muscle is the _____.

○ small intestine ○ diaphragm ○ head

27. To build a strong body, you need exercise and _____.

○ rest ○ big feet ○ hair

SCIENCE 301
YOU GROW AND CHANGE

CONTENTS

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