



# SCIENCE 301 YOU GROW AND CHANGE

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### 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.



**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** (bak' bon). The main bone along the middle of the back of humans and most animals.

**blood** (blud). The red liquid inside the body.

**brain** (bran). The organ inside the head used for learning, thinking, and remembering.

**breathe** (bre  $\overline{TH}$ ). To force air in and out of the lungs.

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

 $\mathbf{cocoa}$  ( $\mathbf{ko'}$   $\mathbf{ko}$ ). A powder that tastes like chocolate.

conscience (kon' shans). Sense of right and wrong.

create (kre at'). To make for the first time.

**creative** ( $kr\bar{e} \ \bar{a}' \ t\bar{i} v$ ). To be able to make something new.

**diaphragm** (di' ə fram'). A muscle between the chest and stomach used for breathing.

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

digestion (di jes' chan). The body changing food for its use.

dissolve (di zolv'). To make a solid into a liquid.

**exhale** (eks hal). To breathe out.

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

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

heart (härt). The organ in the body that pumps the blood.

**inhale** (in hal'). To breathe in.

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

joint (joint). The place where two things are joined together.

large intestine (lärj in tes' tən). An organ in the body where digestion is finished.

**lungs** (lungz). The organ in the body that takes in air while breathing.

mixture (miks' chər). Two or more things together.

**muscle** (mus' əl). Tissues in the body that help the body move.

**nitrogen** (ni' trə jən). A gas that is part of the air you breathe. **nostrils** (nos' trəlz). The openings in the nose.

**oxygen** (ok' si jən). A gas that is part of the air you breathe.

pulse (puls). The beating caused by the heart pumping blood.

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

**saliva** (sə lī' və). The liquid that glands make to keep the mouth wet.

salivary glands (sal' ə ver' e glandz). The glands that make saliva.

scientist (si ən tist). A person who studies science.

**skeleton** (skel' i tn). The bones of the body fitted together.

**skull** (skul). The bones in the head.

**small intestine** (smôl' in tes' tin). An organ in the body where digestion takes place.

**spinal cord** (spī' nəl kôrd). The cord of nerve tissue in the backbone.

stir (stûr). To mix.

**stomach** (stum' ək). The organ in the body that first receives food for digestion.

system (sis' təm). A way to do something.

towel (tou' əl). A piece of cloth or paper for drying.

**trachea** (tra' ke ə). The windpipe where air is carried from the throat to the lungs.

**tube** (toob). A pipe-shaped object.

#### 3 (three)

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

ēā əō ăū ū i ė ä ü ô ã '

Pronunciation Key: hat, age, care, far; let, equal, term; it, ice; hot, open, order; oil; out; cup, put, rule; child; long; thin; /TH/ for then; /zh/ for measure; /ə/ represents /a/ in about, /e/ in taken, /i/ in pencil, /o/ in lemon, and /u/ in circus.

#### 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.

VOCABULARY	
The red	liquid inside

blood	(blud)	The red liquid inside the body.
breathe	(bre <i>TH</i> )	To force air in and out of the
		lungs.
carbon	(kär' bən	The gas exhaled from the
dioxide	dī ok' sīd)	lungs.
create	(kre at')	To make for the first time.
digest	(dī jest')	To change food so the body
		can use it.

exhale	(eks hal')	To breathe out.
inhale	(in hal')	To breathe in.
lungs	(lungz)	The organ in the body that takes in air while breathing.
nitrogen	(nī' trə jən)	A gas that is part of the air you breathe.
nostrils	(nos' trəlz)	The openings in the nose.
oxygen	(ŏk' si jən)	A gas that is part of the air you breathe.
scientist	(sī ən tist)	A person who studies science.
tube	$(t\overline{oo}b)$	A pipe-shaped object.
trachea	(tra' ke ə)	The windpipe where air is carried from the throat to the lungs.

## Special Words Joseph Priestley



#### 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**.