



# SCIENCE

STUDENT BOOK

▶ **6th Grade**

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# SCIENCE 601

## Plant Systems

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**LIFEPAC Test is located in the center of the booklet.** Please remove before starting the unit.

# SCIENCE 600 SUPPLIES

Many of the things that you will need to perform the experiments in Science 600 can be found around the home. For instance, instead of using test tubes, you may substitute baby food jars and lids. Instead of a beaker, you may use a mayonnaise jar. Some of the things you will need to successfully perform the experiments you will just need to borrow or buy. There are resources in your area where you may be able to find these materials. Your local school may lend you a microscope or perhaps you can buy an older one from them when they purchase new ones. There may be major discount department stores in your area that sell these things for low cost. Ordering science material through the mail or over the Internet is also a possibility. With each complete boxed set of science curriculum, you should receive an order blank from a trusted supplier for science supplies in the sizes and amounts that you will need to successfully perform the experiments.

If you did not receive an order blank, call the Alpha Omega Publications Customer Services Department for more information.

A suggested support item for this course is the 6th Grade Science Experiments video, SD0601. The video includes presentations of many of the experiments in this course. Several of the experiments that require special equipment

or materials are demonstrated on these videos. They can either be used for answering the questions of the lab report or as a demonstration of the procedure prior to performing the experiment. A notice is included with each experiment in the LIFEPAK where the video is available.

Remember, it is the supervisors' or parents' responsibility to make sure that all students follow proper safety procedures for experiments and lab work. Any questions that you have about chemicals or supplies should be directed to the supplier of those materials. It cannot be assumed that all necessary warnings and precautions are contained in this material.

As a Christian school curriculum publisher, we discuss what is taught and believed regarding the creation and origins of life on our planet from the Christian point of view. It is the responsibility of the family to decide what they desire to be learned by their students in the school and the home, and whether or not the biblical view is what they want to be taught. There are a number of Christian websites on the Internet, however, that may be examined to get further information on the origins of life from a biblical point of view. One of them is the Creation Research Institute website.



# Body Systems

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## Introduction

Just as God marvelously designed a vast variety of plants, He also created people and animals with various body parts that interrelate in a complex fashion. We call these related parts “body systems.” For example, God designed a way for people and animals to eat and digest food in their bodies. We call this the “digestive system.” All animals and humans have a digestive system. In fact, if we examine the various “systems” within the human body, we can get a good idea of the basic operation of most of the “animal systems” that God has designed.

The human body is among the most wonderful parts of God’s creation. Psalm 139:14 records that we are “fearfully and wonderfully made!” God designed the various parts of our bodies in a very detailed and marvelous fashion. In this LIFEPAAC®, we will explore three major “systems” of the human body: (1) the digestive system, (2) the excretory system, and (3) the skeletal system. By examining these three systems of the human body, you will learn about the body systems common to all animals.

## Objectives

These objectives tell what you should be able to do when you have completed this LIFEPAAC. When you have finished this LIFEPAAC, you should be able to:

1. Name and locate the main parts of the digestive system.
2. Identify the function of each main part of the digestive system.
3. Explain different ways to prevent common digestive diseases.
4. Name and locate the main parts of the excretory system.
5. Identify the function of each main part of the excretory system.
6. Identify ways to prevent common diseases of the excretory system.
7. Name and locate the main parts of the skeletal system—the muscles and bones.
8. Identify the main functions of muscles and bones.
9. Identify ways to prevent common diseases of muscles and bones.

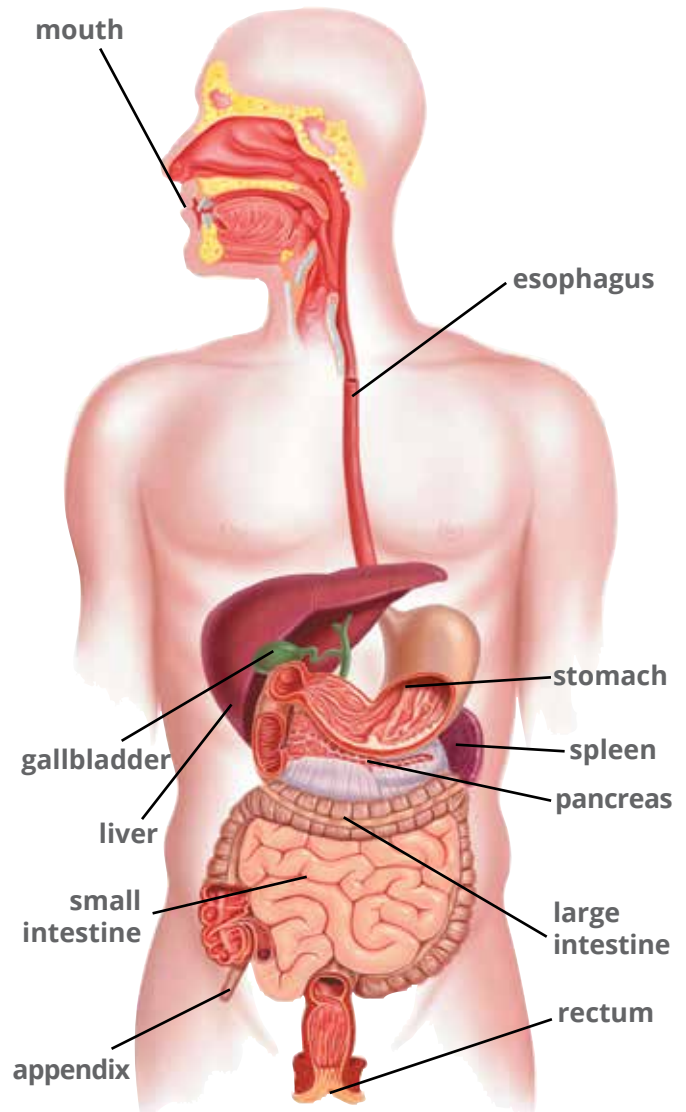
## STRUCTURE

Digestion is a process used by animals to break down their food. Large chemicals like starch and protein must be broken down into simple chemicals. These chemicals must be able to **dis-solve** in water and pass through the cell walls.

Food that is eaten passes through the digestive system, also known as the **alimentary canal**. The digestive system begins with the mouth and continues down through the **esophagus**, stomach, small intestine, large intestine, and rectum. All along the alimentary canal, digestive glands add juices to the food to aid digestion. If these juices are not there at the right time in the right amount, indigestion or other illnesses may result.

Each part has a special task to do. If any one part fails to do that task, the whole body suffers.

We as children of God work the same way. Each one of us is created with a special task to do in life. If we don't do that task the best we can, others who depend on us will suffer (1 Corinthians 12:14-31). God wants us to perform and accomplish the task and roles in life that He has given us to do. We will be the happiest as we do these things.



| The Digestive System



### Complete the following activities.

1.1 What does the digestive system do? \_\_\_\_\_

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1.2 Why is it necessary to digest the food we eat? \_\_\_\_\_

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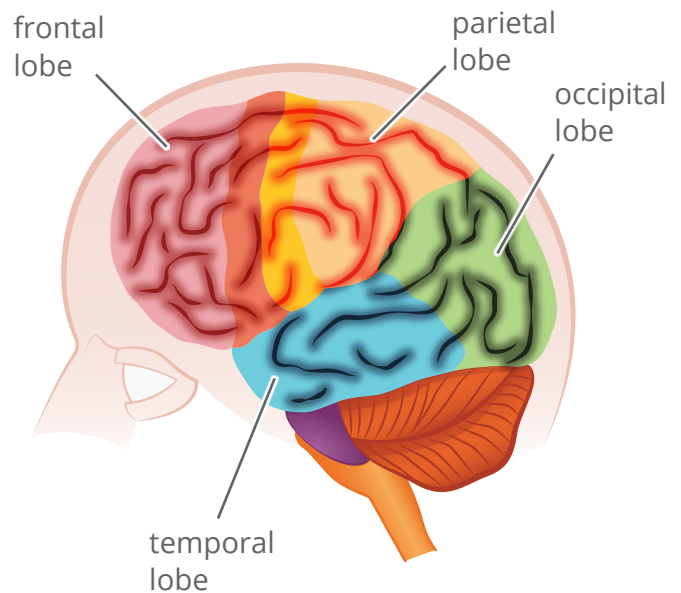
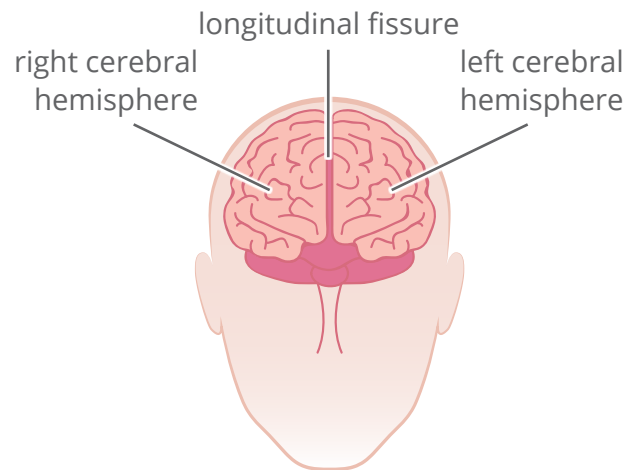
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**Cerebellum.** The second main part of the brain is called the *cerebellum*. It is located in the lower back part of the brain. Its primary function is to coordinate all the muscles so that they work together. If the cerebellum is undeveloped, like it is in a newborn baby, muscular movements are jerky and uncoordinated. As the child grows, the cerebellum develops and causes all the muscles to act together in coordinated movements. This part of the brain also controls our sense of balance so we can walk or run straight.

**Brain stem.** The third main part of the brain is called the *brain stem*. It is located on the back underside of the brain. It is a stalk-like structure that connects the cerebrum with the spinal cord. The brain stem consists of several different parts. The bottom part of the brain stem is called the **medulla**. The medulla has nerve centers that control breathing, heartbeat, and many other vital body functions.

Above the medulla, in the brain stem, is the *pons*. It contains nerve fibers that connect the cerebrum and the cerebellum. Above the pons is the *midbrain*. It contains nerve centers to help control movements of the eyes and the size of the pupils.

The upper part of the brain stem contains the *hypothalamus* and the *thalamus*. There are actually two thalami, one on the left and one on the right. The thalamus receives nerve impulses from various parts of the body and connects them to the appropriate areas of the cortex. The thalamus also relays impulses from one part of the brain to another. The hypothalamus



| The hemispheres and lobes of the cerebrum regulates body temperature, hunger, and other internal conditions of the body. The hypothalamus also controls the activity of the nearby *pituitary gland*.



View 605 States of Matter,  
from the Grade 6 SCIENCE  
EXPERIMENTS Video



Try this experiment to learn about states of matter.

**Overview.** You will examine some common items about you in a home or classroom to determine properties of a solid, a liquid, and a gas.

**These supplies are needed:**

- a balloon
- a clean, square, plastic refrigerator dish
- a small block of wood (or a rock)
- a soda pop (save it to drink)

**Follow these directions.** Place a check mark in the box as you complete each step, and answer the questions as they are presented.

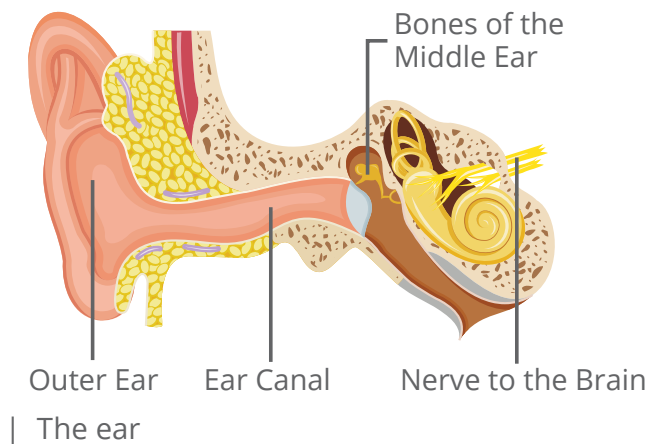
1. Identify some of the things in your room. Try to find a solid, a liquid, and a gas. Write their names in the spaces below.
- 1.1** a. Solid: \_\_\_\_\_  
b. Liquid: \_\_\_\_\_  
c. Gas: \_\_\_\_\_
2. Blow up a balloon. Squeeze it gently.
- 1.2** Is the statement true that a gas changes to take the shape of its container?
3. Examine the soda pop container before opening it.
- 1.3** Does the liquid take on the round shape of the bottle or can? \_\_\_\_\_
4. Open the soda pop. Pour the liquid into the square refrigerator dish.
- 1.4** Does the liquid take on the shape of the container? \_\_\_\_\_
5. Observe the bubbles of fizz which come to the top of the liquid soda pop. This fizz is due to the carbon dioxide gas which is dissolved into the drink. This is why it is called a "carbonated drink." Note carefully that the bubbles of the carbon dioxide gas leave the soda pop.
- 1.5** Does the carbon dioxide gas have a definite shape and volume, or does it take on the shape and volume of the container? \_\_\_\_\_
6. Examine the piece of wood.
- 1.6** Does the wood have a fixed shape and volume? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Experiment 605.A States of Matter

as their source. For example, the membrane of a drum vibrates when it is hit, causing the sound of a drum. A violin or a piano makes sounds when the strings of these instruments are vibrated. A clarinet makes musical sounds when a tiny reed in the mouthpiece vibrates as air is blown across it. A trumpet makes sounds when the lips of the musician vibrate into the mouthpiece! In all of these musical instruments, the sounds are produced by vibrations; and the musical sounds travel out from the instruments in waves.

When air is set into motion by a vibrating object, it can cause other things to vibrate. In fact, this explains how we can hear sound. Sound waves start vibrations on the sensitive part of your ear. As the sound waves reach the eardrum located within the ear, the eardrum begins to vibrate in the same way as the object that originally produced the sound. The



vibrating eardrum, in turn, causes the bones of the middle ear to vibrate. These vibrations are transferred to the nerves in the inner ear. The nerves carry the messages to the brain, enabling us to interpret the sounds that we hear.



**Write the correct letter and answer in each blank.**

- 1.1 Every sound is caused by the \_\_\_\_\_ of an object.  
 a. ringing                                      b. vibration                                      c. radiation
- 1.2 Sound \_\_\_\_\_ radiate out in all directions from a vibrating object.  
 a. waves    b. particles                                      c. notes
- 1.3 The sound of a human voice is produced in the \_\_\_\_\_.  
 a. ear    b. larynx    c. brain
- 1.4 When we speak, air from our lungs rushes across the \_\_\_\_\_, causing them to vibrate.  
 a. teeth    b. gums    c. tightened vocal cords
- 1.5 In all musical instruments, the sounds are produced by \_\_\_\_\_.  
 a. melodies    b. air    c. vibrations

**Do the following activity.**

- 1.6 Explain how we can hear sounds from a vibrating object. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



## SELF TEST 1

Match the following items (each answer, 2 points).

- |       |       |  |               |
|-------|-------|--|---------------|
| 1.01  | _____ | occurs when anything changes its location in space         | a. work       |
| 1.02  | _____ | a push or pull action                                      | b. steam      |
| 1.03  | _____ | the force that pulls things toward the center of the earth | c. water      |
| 1.04  | _____ | the metric measurement of work                             | d. gravity    |
| 1.05  | _____ | force x distance   | e. force      |
| 1.06  | _____ | force used to walk up the steps                            | f. stationary |
| 1.07  | _____ | force used to move a windmill                              | g. motion     |
| 1.08  | _____ | some engines operate on this force                         | h. muscular   |
| 1.09  | _____ | force used to generate some electricity                    | i. foot-pound |
| 1.010 | _____ | English (customary) measurement of work                    | j. joule      |
|       |       |  | k. wind       |

Answer true or false (each answer, 2 points).

- 1.011 \_\_\_\_\_ Our bodies are in constant motion even when they appear to be at complete rest.
- 1.012 \_\_\_\_\_ All matter, except hard objects like steel and iron, are in motion.
- 1.013 \_\_\_\_\_ All things in the universe are in motion.
- 1.014 \_\_\_\_\_ More force is required to pull an object than to lift it.
- 1.015 \_\_\_\_\_ Scientists define work as force moving an object through a distance.
- 1.016 \_\_\_\_\_ An object may be in motion when compared to another object but stationary compared to a third object.
- 1.017 \_\_\_\_\_ A moving body will continue in motion in spite of forces acting upon it.
- 1.018 \_\_\_\_\_ The same amount of work is done when 20 pounds are lifted 100 feet as when 100 pounds are lifted 20 feet.
- 1.019 \_\_\_\_\_ If you have 10 boxes to be lifted to a platform, the same amount of work is done whether 1 person or 5 people move the boxes.
- 1.020 \_\_\_\_\_ Gravity pulls things toward the center of the earth.





# SCIENCE

TEACHER'S GUIDE

▶ **6th Grade**

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# SCIENCE 600

## Teacher's Guide

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## INSTRUCTIONS FOR SCIENCE

The LIFEPAC curriculum for grades two through twelve was written with the daily instructional material written directly in the LIFEPACs. The student is encouraged to read and follow his own instructional material, thus developing independent study habits. The teacher should introduce the LIFEPAC to the student, set a required completion schedule, complete teacher checks, be available for questions regarding both subject content and procedures, administer and grade tests, and develop additional learning activities as desired. Teachers working with several students may schedule their time so that students are assigned a quiet work activity when it is necessary to spend instructional time with one particular student.

The Teacher Notes section of the Teacher's Guide lists the required or suggested materials for the LIFEPACs and provides additional learning activities for the students. The materials section refers only to LIFEPAC materials and does not include materials which may be needed for the additional activities. Additional learning activities provide a change from the daily school routine, encourage the student's interest in learning, and may be used as a reward for good study habits.

If you have limited facilities and are not able to perform all the experiments contained in the LIFEPAC curriculum, the Science Project List may be a useful tool for you. This list prioritizes experiments into three categories: those essential to perform, those which should be performed as time and facilities permit, and

those not essential for mastery of LIFEPACs. Of course, for complete understanding of concepts and student participation in the curriculum, all experiments should be performed whenever practical. Materials for the experiments are shown in Teacher Notes - Materials Needed.

If you have limited facilities and are not able to perform all the experiments contained in the LIFEPAC curriculum, the Science Project List may be a useful tool for you. This list prioritizes experiments into three categories: those essential to perform, those which should be performed as time and facilities permit, and those not essential for mastery of LIFEPACs. Of course, for complete understanding of concepts and student participation in the curriculum, all experiments should be performed whenever practical. Materials for the experiments are shown in Teacher Notes - Materials Needed.

A suggested support item for this course is the 6th Grade Science Experiments video, SD0601. The video includes presentations of many of the experiments in this course. Several of the experiments that require special equipment or materials are demonstrated on these videos. They can either be used for answering the questions of the lab report or as a demonstration of the procedure prior to performing the experiment. A notice is included with each experiment in the LIFEPAC where the video is available.

# TEACHING NOTES

## MATERIALS NEEDED FOR LIFE PAC

### Required

- growing plant
- 4 kernels of corn
- 4 tall, thin bottles
- soda crackers
- iodine solution
- 2 small baby-food jars
- Benedict's solution or glucose test strips
- 4 radish or corn seeds
- 1 plastic bag
- paper towels
- scissors
- stapler
- 2 thumbtacks
- hand lens
- water
- food coloring (red or blue)
- celery stick with leaves
- tall baby food jar or glass
- metric ruler
- fresh leaf of lettuce
- single-edged razor blade
- microscope
- microscope slide and slip cover

### Suggested

- plant publications from county agent
- Pyrex container (about 250 ml)
- alcohol
- hot plate
- iodine solution
- test tube
- encyclopedia or online resources
- 6th grade Science Experiments video

## ADDITIONAL LEARNING ACTIVITIES

### Section 1: Photosynthesis System

1. Have your students place several plants on the window sill. Turn several of them slightly each day. Let others remain in one position. Compare the plants at the end of two weeks.
2. Place several plants in different types of light, including the darkness of a closet. Compare plants at the end of two weeks.
3. Have the students examine different fall leaves under a microscope. How are they different from the green leaf section?
4. Have the students examine the root of a plant. Then, have them describe the nodules on the plant.
5. Look up several desert plants in an encyclopedia or online. Compare these plants to plants with leaves.
6. Plant some morning glory plants. Observe the time that the flower blooms. Why does this happen?

# ANSWER KEYS

## SECTION 1

- 1.1 The water level in both tubes dropped. The one in the light dropped more than the one in the dark
- 1.2 yes
- 1.3 the one in the light
- 1.4 light
- 1.5 amount of light
- 1.6 chloroplasts
- 1.7 palisade
- 1.8 top
- 1.9 As follows:

SEEDS IN THE DARK		
Date	Wet Seed	Dry Seed
1	no change in size	no change
3	seed larger	no change
5	root and stem have begun to grow	no change
7	root and stem about 4 cm long	no change
9	root and stem about 8 cm long; root white, stem white	no change
11	root and stem about 10 cm long; root and stem white	no change

SEEDS IN THE SUN		
Date	Wet Seed	Dry Seed
1	no change in size	no change
3	seed larger	no change
5	root and stem have begun to grow	no change
7	root and stem about 4 cm long	no change
9	root and stem about 9 cm long; root white, stem green	no change
11	root and stem about 12 cm long; root and stem green	no change

- 1.10 wet
- 1.11 sunlight
- 1.12 Any order:
  - a. water
  - b. sunlight
- 1.13 sunlight
- 1.14 those in sunlight
- 1.15 sunlight
- 1.16 sunlight
- 1.17 palisade
- 1.18 top
- 1.19 The top of the leaf will get more sunshine. The bottom of the leaf will be in the shade (dark).

- 1.20 **(Across)**
- 1. chloroplast
  - 6. life
  - 7. plants
  - 9. algae
  - 11. energy
- (Down)**
- 1. complex
  - 2. root
  - 3. animal
  - 4. tree
  - 5. made or gave
  - 8. say
  - 10. God

- 1.21 **Record of Results**
- blue
  - yellow
  - orange or green
  - red
- 1.22 b. decreased
- 1.23 a. blue to red
- 1.24 a. glucose increased

- 1.25 b
- 1.26 a
- 1.27 d
- 1.28 e
- 1.29 c
- 1.30 right (red)
- 1.31 left (green)
- 1.32 red
- 1.33 red
- 1.34 red
- 1.35 Because the leaf soaks up the rest of the colors. The green color bounces back so we can see it.
- 1.36 Because all that light bounces off and the leaf doesn't have any sunlight to use in photosynthesis.

- 1.37** Any order:  
 a. temperature  
 b. amount of sunshine  
 c. amount of rain (moisture)
- 1.38** Natural fertilizers that come from living things are called organic fertilizers.
- 1.39** d  
**1.40** a  
**1.41** e  
**1.42** b  
**1.43** f  
**1.44** c

## SELF TEST 1

- 1.01** h  
**1.02** g  
**1.03** a  
**1.04** l  
**1.05** c  
**1.06** k  
**1.07** m  
**1.08** e  
**1.09** f  
**1.010** i  
**1.011** red  
**1.012** glucose  
**1.013** oxygen  
**1.014** organic  
**1.015** Any order:  
 a. light (color)  
 b. water  
 c. minerals  
 d. carbon dioxide
- 1.016** Any order:  
 a. palisade  
 b. spongy
- 1.017** b  
**1.018** c  
**1.019** d  
**1.020** b  
**1.021** d  
**1.022** a  
**1.023** b  
**1.024** a  
**1.025** c  
**1.026** d
- 1.027** The leaf factory takes water and carbon dioxide with chlorophyll and light energy to make starch and oxygen.
- 1.028** Hint: This is a good place to receive oral answers and discussion.
- 1.029** Refer to diagram in LIFE PAC.
- 1.030** Example: I would give the plants the best fertilizer for their growth. I would put them in red light, keep them watered, and obtain a high carbon dioxide level.



## SECTION 3

- 3.1** Record of observations of stem in water
- | Date | Observations  |
|------|---|
| 1    | No change.  |
| 3    | No change.  |
| 5    | White bumps begin to show at the cut on the stem.     |
| 7    | Roots appear to be growing on the stem.               |
| 9    | Roots are about 2-5 mm long. Several are now visible. |
- 3.2** It starts to grow roots.
- 3.3** yes
- 3.4** The stem produced chemicals to start the roots growing.
- 3.5** Use gibberellin.
- 3.6** Place the stem in water.
- 3.7**
- nongreen
  - abnormal
  - nonflowering
  - misuse
  - nontoxic
  - nonrigid
  - misinterpret
  - nonprotective
  - misplant
- 3.8** 2, 4-D
- 3.9** cancer, liver decay, or disease
- 3.10** Examples: oats, soybeans, beets
- 3.11** Examples: Farmers and gardeners use chemical regulators to control harmful weeds in their crops.
- 3.12** Example: Some chemical regulators are harmful to man. Some chemical regulators pollute the soil and atmosphere.

## SELF TEST 3

- 3.01** h
- 3.02** g
- 3.03** j
- 3.04** d
- 3.05** l
- 3.06** i
- 3.07** e
- 3.08** c
- 3.09** a
- 3.010** b
- 3.011** false
- 3.012** false
- 3.013** true
- 3.014** true
- 3.015** false
- 3.016** false
- 3.017** true
- 3.018** true
- 3.019** false
- 3.020** false
- 3.021** b
- 3.022** c
- 3.023** a
- 3.024** d
- 3.025** Any order:
- anchor plants
  - transport water and minerals
  - store food
- 3.026** broad
- 3.027** tissue decay
- 3.028** cortex
- 3.029** glucose
- 3.030** The grass will turn yellow because it can't get sunlight and the chloroplasts die.
- 3.031** Plant veins transport minerals and water from the roots to the leaf tips.
- 3.032** The stomata open and close, letting oxygen out and carbon dioxide into the leaf.
- 3.033** When the leaf dies, the chloroplast dies. This causes the green chlorophyll to be lost so the other colors can be seen.

## LIFEPAC TEST

1. a
2. g
3. f
4. j
5. c
6. i
7. e
8. h
9. d
10. b
11. cuticle
12. epidermis
13. chloroplast
14. xylem
15. phloem
16. d. epidermis
17. b. root hair
18. a. vascular cylinder
19. e. root cap
20. c. cortex
21. a
22. b
23. a
24. d
25. c
26. d
27. d
28. a
29. a
30. c
31. Any order:
  - a. color of light
  - b. amount of water and/or minerals
  - c. amount of carbon dioxide
32. Answers may vary. Any order:
  - a. can cause cancer in man and animals
  - b. may kill plants you don't want killed

## ALTERNATE LIFEPAC TEST

1. c
2. e
3. h
4. b
5. j
6. i
7. a
8. f
9. g
10. d
11. b
12. e
13. a
14. c
15. d
16. vascular cylinder
17. root hair
18. cortex
19. epidermis
20. root cap
21. b
22. a
23. c
24. c
25. c
26. a
27. c
28. b
29. c
30. d
31. Answers may vary. Examples; any order:
  - a. Auxin causes young cells to grow longer than normal.
  - b. Gibberellin helps corn and wheat grow three to five times as tall as normal.
  - c. Auxin can produce tomatoes with no seeds.
32. Answers may vary. Examples; either order:
  - a. Some artificial regulators are selective. They kill weeds but not crops.
  - b. Yields are greater so prices are lower.

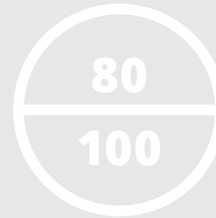
# SCIENCE 601

## ALTERNATE LIFEPAC TEST

**NAME** \_\_\_\_\_

**DATE** \_\_\_\_\_

**SCORE** \_\_\_\_\_

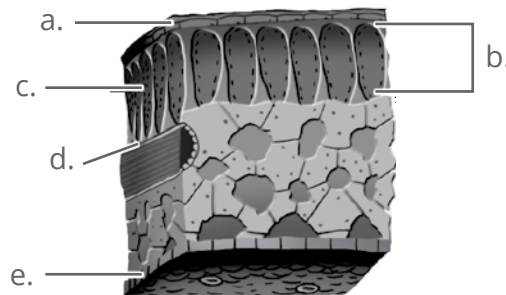


**Match these items** (each answer, 2 points).

- |                      |   |
|----------------------|---|
| 1. _____ chlorophyll | a. sugar made during photosynthesis                   |
| 2. _____ light       | b. a chemical produced in the growing tips of roots   |
| 3. _____ oxygen      | c. green "stuff" in plants                            |
| 4. _____ auxin       | d. storage part of root                               |
| 5. _____ legume      | e. energy for photosynthesis                          |
| 6. _____ enzyme      | f. natural fertilizer                                 |
| 7. _____ glucose     | g. man-made   |
| 8. _____ manure      | h. by-product of photosynthesis                       |
| 9. _____ artificial  | i. chemical used to help digestion                    |
| 10. _____ cortex     | j. a plant which does not take nitrogen from the soil |

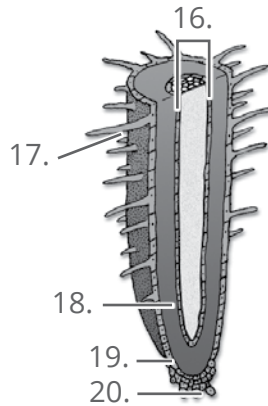
**Write the correct letter to match with the part on the line** (each answer, 3 points).

11. \_\_\_\_\_ palisade layer
12. \_\_\_\_\_ stomata
13. \_\_\_\_\_ cuticle
14. \_\_\_\_\_ chloroplast
15. \_\_\_\_\_ phloem



Complete this diagram with the name of each part (each answer, 4 points).

- 16. \_\_\_\_\_
- 17. \_\_\_\_\_
- 18. \_\_\_\_\_
- 19. \_\_\_\_\_
- 20. \_\_\_\_\_



Write the letter of the correct answer on each line (each answer, 3 points).

- 21. Iodine turns \_\_\_\_\_ bluish-black.
  - a. sugar
  - b. starch
  - c. fats
  - d. protein
- 22. The worst light for growing plants is \_\_\_\_\_.
  - a. green
  - b. blue
  - c. orange
  - d. red
- 23. Leaves appear green because the \_\_\_\_\_ light bounces off the leaf.
  - a. white
  - b. black
  - c. green
  - d. red
- 24. For plants to grow best, they must have \_\_\_\_\_.
  - a. light and food
  - b. oxygen and food
  - c. light, food, water, and carbon dioxide
  - d. air
- 25. Natural fertilizer is called \_\_\_\_\_ fertilizer.
  - a. artificial
  - b. liquid
  - c. organic
  - d. spongy
- 26. The use of \_\_\_\_\_ indicates the presence of glucose by turning red.
  - a. Benedict's solution
  - b. litmus
  - c. iodine
  - d. alcohol
- 27. Water and minerals are absorbed by \_\_\_\_\_.
  - a. leaves
  - b. stems
  - c. root hairs
  - d. cortex
- 28. Water and minerals are carried upward by \_\_\_\_\_.
  - a. phloem
  - b. xylem
  - c. pith
  - d. bark
- 29. The gas plants need to carry on photosynthesis is \_\_\_\_\_.
  - a. oxygen
  - b. nitrogen
  - c. carbon dioxide
  - d. methane
- 30. The chemical found in saliva is a(n) \_\_\_\_\_.
  - a. legume
  - b. bacteria
  - c. starch
  - d. enzyme