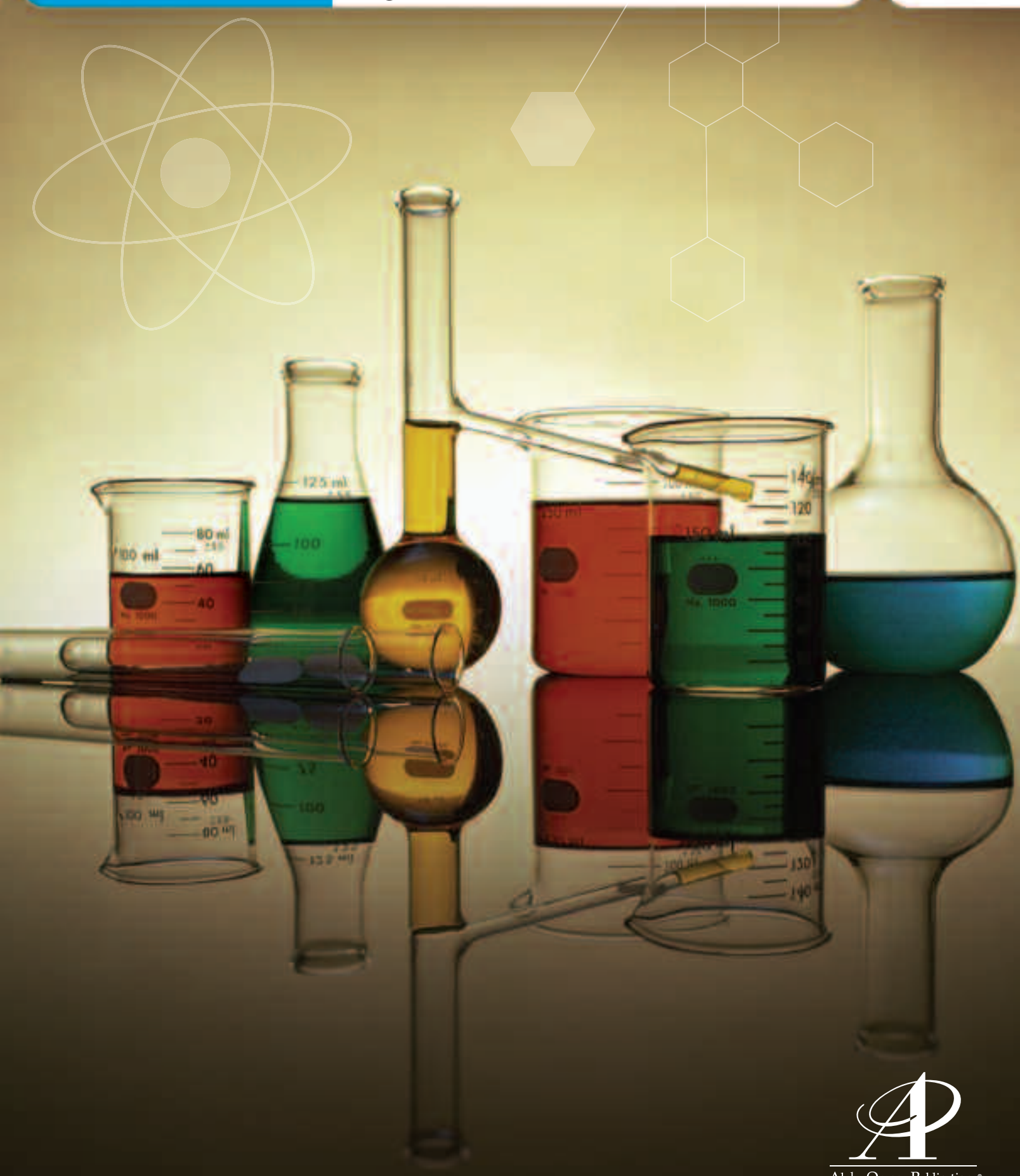
LIFEPAC®

Science

Diagnostic Tests

200-800



Alpha Omega Publications®

Science 200-800

Diagnostic Tests

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804 N. 2nd Ave. E., Rock Rapids, IA 51246-1759

PLACEMENT TEST for the LIFEPAC CURRICULUM

Science 200-800

Instructions

This test is designed to aid the teacher or parent in proper placement of the student into the LIFEPAC curriculum. It has two sections: the Student Test and the Answer Key. The Answer Key follows the Student Test.

This is not a timed test and the student should be given an opportunity to answer each question adequately. If the student becomes bogged down and the test seems too difficult, skip to the next section. If the test is still too difficult, this child's academic skill level has been reached and testing may stop. Each test level should take no longer than one hour.

Testing should begin approximately two grade levels below the student's current or just completed grade level. For example, a student entering fifth grade [500] should begin testing at the third grade [300] level. (See Below.) Of course, a second or third grader could not test below the second grade level. This allows for proper grade level placement as well as identification of any learning gaps that the student may have.

Once the test has been administered, it is ready to be scored. The teacher or parent does all of the scoring. **Each section has 10 numbered questions. Each numbered question equals one point.** Use the Answer Key to mark all incorrect answers on the Student Test. Next record the total number of **correct** answers in the box beneath the LIFEPAC number in the right hand column. **When all tests have been graded, transfer the number correct by LIFEPAC to the Student Placement Worksheet on the back of the answer keys.** Then add the total number of points per grade level.

Test	Level	Test	Level
201 - 210	Level 2	601 - 610	Level 6
301 - 310	Level 3	701 - 710	Level 7
401 - 410	Level 4	801 - 810	Level 8
501 - 510	Level 5		

201

1. Some nonliving things are rocks, stars, and _____.
   a. trees — 1a. ☐
   b. dogs — b. ☐
   c. the sun — c. ☐

2. Some living things are birds, fish, and _____.
   a. plants — 2a. ☐
   b. rocks — b. ☐
   c. clouds — c. ☐

3. Living things need air, water, food, and _____.
   a. trees — 3a. ☐
   b. stars — b. ☐
   c. light — c. ☐

4. God made _____.
   a. cars — 4a. ☐
   b. trees — b. ☐
   c. toys — c. ☐

5. God made _____.
   a. rivers — 5a. ☐
   b. pictures — b. ☐
   c. clocks — c. ☐

6. God made _____.
   a. pencils — 6a. ☐
   b. rabbits — b. ☐
   c. desks — c. ☐

7. Man made _____.
   a. bees — 7a. ☐
   b. birds — b. ☐
   c. boxes — c. ☐

8. Man made _____.
   a. the sun — 8a. ☐
   b. trains — b. ☐
   c. the moon — c. ☐

9. Man made _____.
   a. pencils — 9a. ☐
   b. rocks — b. ☐
   c. fish — c. ☐

10. A living object that can think and has a soul is _____.
    a. rock — 10a. ☐
    b. man — b. ☐
    c. fish — c. ☐

☐

202

1. Food for plants is made by _____.
   a. stems
   b. leaves
   c. veins

   1a. ☐
   b. ☐
   c. ☐

2. Water is carried up the stem from the roots by _____.
   a. leaves
   b. stems
   c. tubes

   2a. ☐
   b. ☐
   c. ☐

3. Water and food move through small tubes called _____.
   a. roots
   b. veins
   c. stems

   3a. ☐
   b. ☐
   c. ☐

4. Plants need _____ to help the green work.
   a. light
   b. wind
   c. animals

   4a. ☐
   b. ☐
   c. ☐

5. Plants need _____ to make food.
   a. seeds
   b. air
   c. sleep

   5a. ☐
   b. ☐
   c. ☐

6. All plants need some _____ to live.
   a. grass
   b. wind
   c. water

   6a. ☐
   b. ☐
   c. ☐

7. Plants live in different places called _____.
   a. habits
   b. habitats
   c. bad habits

   7a. ☐
   b. ☐
   c. ☐

8. Most plants that live in the desert need very little _____.
   a. water
   b. sun
   c. air

   8a. ☐
   b. ☐
   c. ☐

9. Plants can grow from a cutting, a root, or a _____.
   a. rock
   b. bulb
   c. petal

   9a. ☐
   b. ☐
   c. ☐

10. Plants need air, sunshine, and _____.
    a. wind
    b. rest
    c. water

    10a. ☐
    b. ☐
    c. ☐

203

1. Animals have keen _____ to help them survive.
   a. senses — 1a. ☐
   b. bones — b. ☐
   c. zoos — c. ☐

2. When an animal growls, it tells you to _____ .
   a. come close — 2a. ☐
   b. keep away — b. ☐
   c. feed it — c. ☐

3. A cat stays clean by _____ its fur.
   a. pulling — 3a. ☐
   b. combing — b. ☐
   c. licking — c. ☐

4. A giraffe and a mouse are _____ size.
   a. the same — 4a. ☐
   b. a different — b. ☐
   c. a big — c. ☐

5. Most small animals make their homes in _____ .
   a. trees — 5a. ☐
   b. boxes — b. ☐
   c. holes — c. ☐

6. Birds are covered with feathers to help them _____ .
   a. fly — 6a. ☐
   b. walk — b. ☐
   c. nest — c. ☐

7. All animals need _____ to breathe.
   a. water — 7a. ☐
   b. food — b. ☐
   c. air — c. ☐

8. Some animals change _____ to stay safe.
   a. feet — 8a. ☐
   b. color — b. ☐
   c. hands — c. ☐

9. God gave all animals _____ to help them live.
   a. instinct — 9a. ☐
   b. inside — b. ☐
   c. into — c. ☐

10. Fish get oxygen through their _____ .
    a. bills — 10a. ☐
    b. gills — b. ☐
    c. fins — c. ☐

204

1. All people have muscles connected to their _____.
   a. food — 1a. ☐
   b. bones — b. ☐
   c. dogs — c. ☐

2. All people have a _____ to pump blood.
   a. head — 2a. ☐
   b. bone — b. ☐
   c. heart — c. ☐

3. Little holes in the skin are called _____.
   a. pores — 3a. ☐
   b. bone — b. ☐
   c. heart — c. ☐

4. You need at least _____ hours of sleep each night to stay healthy.
   a. 2 — 4a. ☐
   b. 20 — b. ☐
   c. 9 — c. ☐

5. People need to eat from the _____ food groups everyday.
   a. three — 5a. ☐
   b. four — b. ☐
   c. five — c. ☐

6. People need to drink _____ to stay healthy.
   a. water — 6a. ☐
   b. pop — b. ☐
   c. soda — c. ☐

7. The group of people you live with is your _____.
   a. friends — 7a. ☐
   b. family — b. ☐
   c. pets — c. ☐

8. God gave you a mother and father to _____ you.
   a. obey — 8a. ☐
   b. harm — b. ☐
   c. take care of — c. ☐

9. People in your family help you because they _____ you.
   a. live — 9a. ☐
   b. love — b. ☐
   c. grow — c. ☐

10. Machines inside your body are called _____.
    a. organs — 10a. ☐
    b. bones — b. ☐
    c. muscles — c. ☐

205

1. Pets and plants need _____.
   a. care 1a. ☐
   b. friends b. ☐
   c. families c. ☐

2. Pets and plants need air, food, and _____.
   a. flowers 2a. ☐
   b. toys b. ☐
   c. light c. ☐

3. A pet needs to have _____ in a dish.
   a. water 3a. ☐
   b. winter b. ☐
   c. wait c. ☐

4. A wild animal _____ a good pet.
   a. is 4a. ☐
   b. is not b. ☐
   c. are c. ☐

5. A good house plant would be a _____.
   a. tree 5a. ☐
   b. weed b. ☐
   c. sweet potato c. ☐

6. A good pet would be a _____.
   a. lion 6a. ☐
   b. giraffe b. ☐
   c. kitten c. ☐

7. A pet is *not* _____.
   a. a toy 7a. ☐
   b. an animal b. ☐
   c. fun c. ☐

8. If you take care of your plant, it will _____.
   a. green 8a. ☐
   b. grow b. ☐
   c. die c. ☐

9. Do not feed your pet _____.
   a. anything 9a. ☐
   b. too much b. ☐
   c. enough c. ☐

10. Some plants do not have _____.
    a. roots 10a. ☐
    b. seeds b. ☐
    c. flowers c. ☐

206

1. Your five senses are seeing, touching, hearing, tasting and _____.
   a. smelling
   b. walking
   c. talking

1a. ☐
b. ☐
c. ☐

2. The sense that tells you that a flower is white and green is _____.
   a. hearing
   b. touching
   c. seeing

2a. ☐
b. ☐
c. ☐

3. The sense that tells you that your pillow is soft is _____.
   a. touching
   b. hearing
   c. smelling

3a. ☐
b. ☐
c. ☐

4. You taste sweet food at the _____ of your tongue.
   a. tip
   b. bottom
   c. edge

4a. ☐
b. ☐
c. ☐

5. You hear God's Word with your _____.
   a. eyes
   b. nose
   c. ears

5a. ☐
b. ☐
c. ☐

6. You use your senses to help you _____ God's world.
   a. see
   b. know
   c. hear

6a. ☐
b. ☐
c. ☐

7. A blind person reads by using _____.
   a. a white cane
   b. a dog
   c. Braille

7a. ☐
b. ☐
c. ☐

8. A person who cannot hear is _____.
   a. deaf
   b. blind
   c. home

8a. ☐
b. ☐
c. ☐

9. You can talk to a deaf person with your _____.
   a. feet
   b. hands
   c. eyes

9a. ☐
b. ☐
c. ☐

10. When someone talks I should _____.
    a. talk
    b. listen
    c. touch

10a. ☐
b. ☐
c. ☐

☐

207

1. Red and yellow make the new color _____.
   a. purple — 1a. ☐
   b. green — b. ☐
   c. orange — c. ☐

2. Blue and yellow make the new color _____.
   a. purple — 2a. ☐
   b. orange — b. ☐
   c. green — c. ☐

3. If you want a darker color, you add _____.
   a. yellow — 3a. ☐
   b. black — b. ☐
   c. white — c. ☐

4. Everything has a _____.
   a. shape — 4a. ☐
   b. leaf — b. ☐
   c. thorn — c. ☐

5. A circle is round and _____.
   a. square — 5a. ☐
   b. pointed — b. ☐
   c. flat — c. ☐

6. If you pull on a square, you have a _____.
   a. rectangle — 6a. ☐
   b. triangle — b. ☐
   c. circle — c. ☐

7. A rock is _____.
   a. soft — 7a. ☐
   b. hard — b. ☐
   c. fluffy — c. ☐

8. Paper is _____.
   a. bumpy — 8a. ☐
   b. sticky — b. ☐
   c. smooth — c. ☐

9. Clothes are _____.
   a. hard — 9a. ☐
   b. rough — b. ☐
   c. soft — c. ☐

10. Water is _____.
    a. wet — 10a. ☐
    b. dry — b. ☐
    c. thick — c. ☐

208

1. We all live in an _____.
   a. environment
   b. envelope
   c. everything

   1a. ☐ b. ☐ c. ☐

2. The environment has both living and _____ things.
   a. animal
   b. not living
   c. plant

   2a. ☐ b. ☐ c. ☐

3. Each part of the environment is _____ the others.
   a. the same as
   b. connected to
   c. greener than

   3a. ☐ b. ☐ c. ☐

4. Something that makes water, air, or ground dirty is called _____.
   a. pollution
   b. ecology
   c. fuel

   4a. ☐ b. ☐ c. ☐

5. You help stop pollution by _____ old things.
   a. cycling
   b. recycling
   c. eating

   5a. ☐ b. ☐ c. ☐

6. When you study how living things and nonliving things need each other, you learn about _____.
   a. pollution
   b. trash
   c. ecology

   6a. ☐ b. ☐ c. ☐

7. You can take care of God's world by _____.
   a. picking up trash
   b. throwing candy on the ground
   c. making noise

   7a. ☐ b. ☐ c. ☐

8. Too much noise _____ the world.
   a. helps
   b. hurts
   c. heals

   8a. ☐ b. ☐ c. ☐

9. Noah helped care for God's world and save it from _____.
   a. pollution
   b. fire
   c. The Flood

   9a. ☐ b. ☐ c. ☐

10. When you make new things out of old things, it is called _____.
    a. cycle
    b. recycling
    c. melting

    10a. ☐ b. ☐ c. ☐

☐

209

1. Some animals can change their _____.
   a. color — 1a. ☐
   b. hands — b. ☐
   c. feet — c. ☐

2. People change as they _____.
   a. sing — 2a. ☐
   b. read — b. ☐
   c. grow up — c. ☐

3. Some animals' fur gets very thick in the _____.
   a. summer — 3a. ☐
   b. winter — b. ☐
   c. spring — c. ☐

4. In most places winter weather is _____.
   a. hot — 4a. ☐
   b. warm — b. ☐
   c. cold — c. ☐

5. Leaves change their color in _____.
   a. spring — 5a. ☐
   b. fall — b. ☐
   c. summer — c. ☐

6. "To everything there is a _____ ."
   a. season — 6a. ☐
   b. winter — b. ☐
   c. summer — c. ☐

7. God's love is _____.
   a. short — 7a. ☐
   b. everlasting — b. ☐
   c. long — c. ☐

8. God's Word _____.
   a. changes — 8a. ☐
   b. never changes — b. ☐
   c. always changes — c. ☐

9. God's love is like a _____.
   a. circle — 9a. ☐
   b. line — b. ☐
   c. square — c. ☐

10. All winter long some animals _____.
    a. eat — 10a. ☐
    b. drink — b. ☐
    c. sleep — c. ☐

210

1. The things you see around you make up your _____.
   a. food — 1a. ☐
   b. environment — b. ☐
   c. toys — c. ☐

2. In the winter the maple tree _____.
   a. buds — 2a. ☐
   b. has leaves — b. ☐
   c. has no leaves — c. ☐

3. You can take care of your environment by _____.
   a. riding a bike — 3a. ☐
   b. eating — b. ☐
   c. washing windows — c. ☐

4. In the summer you can _____.
   a. ice skate — 4a. ☐
   b. swim — b. ☐
   c. make a snowman — c. ☐

5. People can fight pollution by _____.
   a. picking up trash — 5a. ☐
   b. going to the store — b. ☐
   c. eating — c. ☐

6. People grow from baby to child to _____.
   a. worker — 6a. ☐
   b. adult — b. ☐
   c. kid — c. ☐

7. Your teeth will be healthy if you _____ them.
   a. grind — 7a. ☐
   b. paint — b. ☐
   c. brush — c. ☐

8. A coat keeps you _____.
   a. cold — 8a. ☐
   b. warm — b. ☐
   c. big — c. ☐

9. Things that you can smell have an _____.
   a. odor — 9a. ☐
   b. order — b. ☐
   c. ears — c. ☐

10. Loud sounds can hurt your _____.
    a. eyes — 10a. ☐
    b. nose — b. ☐
    c. ears — c. ☐

301

1. Two things that people have that animals do not have are _____.
   a. hairs and nails — 1a. ☐
   b. a conscience and a spirit — b. ☐
   c. a conscience and a brain — c. ☐
   d. a spirit and a tail — d. ☐
2. Both animals and people can _____.
   a. be creative — 2a. ☐
   b. talk with God — b. ☐
   c. breathe and eat — c. ☐
   d. be sorry when they have done something wrong — d. ☐
3. People, not animals _____.
   a. have a skeleton — 3a. ☐
   b. have a heart — b. ☐
   c. need exercise — c. ☐
   d. have a mind to figure things out — d. ☐
4. Digestion happens in the stomach and _____.
   a. small intestines — 4a. ☐
   b. heart — b. ☐
   c. lungs — c. ☐
   d. blood — d. ☐
5. The food the body does not need is _____.
   a. digested again — 5a. ☐
   b. passed off as waste — b. ☐
   c. taken by the blood out of the body — c. ☐
   d. taken back to the store — d. ☐
6. Food is taken to all parts of your body by the _____.
   a. air — 6a. ☐
   b. stomach — b. ☐
   c. blood — c. ☐
   d. lungs — d. ☐
7. All living things need _____.
   a. nitrogen — 7a. ☐
   b. oxygen — b. ☐
   c. carbon dioxide — c. ☐
   d. blood — d. ☐
8. Important to breathing are your nostrils, windpipe, and _____.
   a. lungs — 8a. ☐
   b. stomach — b. ☐
   c. blood — c. ☐
   d. exercise — d. ☐
9. To keep your body growing and changing you need air, food, water, _____.
   a. jogging, and playing — 9a. ☐
   b. oxygen, and blood — b. ☐
   c. exercise, and rest — c. ☐
   d. books, and sleep — d. ☐
10. To know how fast the heart beats, you feel the _____.
    a. head — 10a. ☐
    b. pulse — b. ☐
    c. purse — c. ☐
    d. nose — d. ☐

302

1. The part of a green plant that takes in water and minerals is the _____.
   a. leaves — 1a. ☐
   b. stem — b. ☐
   c. seeds — c. ☐
   d. roots — d. ☐
2. The part of a green plant that makes food and gives off oxygen is the _____.
   a. leaves — 2a. ☐
   b. stem — b. ☐
   c. seeds — c. ☐
   d. roots — d. ☐
3. The part of a green plant that takes water and minerals to the leaves is the _____.
   a. leaves — 3a. ☐
   b. stem — b. ☐
   c. seeds — c. ☐
   d. roots — d. ☐
4. In order to grow, plants need water, minerals, _____.
   a. the right temperature, and rocks — 4a. ☐
   b. the right temperature, and oxygen — b. ☐
   c. carbon dioxide, and the right temperature — c. ☐
   d. oxygen and soil — d. ☐
5. Green plants _____.
   a. take in carbon dioxide and give off minerals — 5a. ☐
   b. take in oxygen and give off water — b. ☐
   c. take in minerals and give off carbon dioxide — c. ☐
   d. take in carbon dioxide and give off oxygen — d. ☐
6. Green plants are green because they have _____.
   a. oxygen — 6a. ☐
   b. carbon dioxide — b. ☐
   c. minerals — c. ☐
   d. chlorophyll — d. ☐
7. A food that we eat that is really a seed is _____.
   a. an onion — 7a. ☐
   b. a carrot — b. ☐
   c. a lima bean — c. ☐
   d. celery — d. ☐
8. A strawberry plant can make a new strawberry plant by using its _____.
   a. seeds — 8a. ☐
   b. stems — b. ☐
   c. roots — c. ☐
   d. leaves — d. ☐
9. New plants can grow from seeds, stems, roots, or _____.
   a. bulbs — 9a. ☐
   b. bark — b. ☐
   c. rocks — c. ☐
   d. water — d. ☐
10. Temperature is measured by _____.
    a. degrees — 10a. ☐
    b. ounces — b. ☐
    c. inches — c. ☐
    d. feet — d. ☐

303

1. Reptiles are different from birds in their size, shape, _____.
   a. color, and being cold-blooded — 1a. ☐
   b. breathing, and being alive — b. ☐
   c. color, and breathing — c. ☐
   d. color, and having a heart — d. ☐
2. Animals that have a backbone belong to a group called _____.
   a. mammals — 2a. ☐
   b. vertebrates — b. ☐
   c. insects — c. ☐
   d. birds — d. ☐
3. Animals that have a head, thorax, abdomen, and antenna are called _____.
   a. mammals — 3a. ☐
   b. vertebrates — b. ☐
   c. insects — c. ☐
   d. birds — d. ☐
4. Two groups of vertebrates that are warm-blooded are _____.
   a. reptiles and birds — 4a. ☐
   b. fish and mammals — b. ☐
   c. birds and amphibians — c. ☐
   d. birds and mammals — d. ☐
5. Animals that are born alive (not from an egg) and make milk for their babies are called _____.
   a. mammals — 5a. ☐
   b. vertebrates — b. ☐
   c. reptiles — c. ☐
   d. whales — d. ☐
6. Fish, amphibians, reptiles, birds, and mammals are all _____.
   a. invertebrates — 6a. ☐
   b. insects — b. ☐
   c. vertebrates — c. ☐
   d. cold-blooded — d. ☐
7. The metamorphosis stages of a butterfly are _____.
   a. egg, cocoon, adult — 7a. ☐
   b. egg, larva, pupa, adult — b. ☐
   c. egg, adult, egg, pupa — c. ☐
   d. butterfly, cocoon, caterpillar, egg — d. ☐
8. The metamorphosis of egg, tadpole, and adult fits the _____.
   a. vertebrates — 8a. ☐
   b. reptiles — b. ☐
   c. mammals — c. ☐
   d. toads and frogs — d. ☐
9. Reptiles, birds, and mammals in order to breathe use _____.
   a. gills — 9a. ☐
   b. lungs — b. ☐
   c. both gills and lungs — c. ☐
   d. pores — d. ☐
10. To molt is to _____.
    a. grow — 10a. ☐
    b. multiply — b. ☐
    c. shed — c. ☐
    d. add — d. ☐

304

1. The five food groups we should eat from each day are _____.
   a. protein, eggs, grains, cereal, vegetables
   b. dairy, protein, cheese, cereal, fruits
   c. fruits, eggs, protein, grains, vegetables
   d. fruits, vegetables, dairy, protein, grains

1a. ☐
b. ☐
c. ☐
d. ☐

2. If you had corn, an apple, and milk for lunch, you still need _____.
   a. an egg sandwich
   b. a piece of pie
   c. a glass of pop
   d. a banana

2a. ☐
b. ☐
c. ☐
d. ☐

3. Bananas belong to the fruits group. The item that belongs to the protein group is _____.
   a. cottage cheese
   b. oatmeal
   c. rice
   d. hamburger

3a. ☐
b. ☐
c. ☐
d. ☐

4. Food helps you grow taller and _____.
   a. gives you energy
   b. makes you happy
   c. helps you obey
   d. makes your eyes blue

4a. ☐
b. ☐
c. ☐
d. ☐

5. Food helps keep you warm and _____.
   a. makes you sick
   b. makes you get smarter
   c. keeps you from getting sick
   d. gives you a toothache

5a. ☐
b. ☐
c. ☐
d. ☐

6. Spaghetti belongs to the food group called _____.
   a. dairy
   b. fruits
   c. grains
   d. meat & beans

6a. ☐
b. ☐
c. ☐
d. ☐

7. To keep you well and strong, you should drink each day four to six glasses of _____.
   a. mud
   b. pop
   c. coffee
   d. water

7a. ☐
b. ☐
c. ☐
d. ☐

8. Brush your teeth the way they grow and each day wear _____.
   a. clean clothes
   b. new clothes
   c. torn clothes
   d. old clothes

8a. ☐
b. ☐
c. ☐
d. ☐

9. One way to take good care of your eyes is _____.
   a. to wear sunglasses at night
   b. never eat carrots
   c. read in dim light
   d. read with good light coming over your shoulder

9a. ☐
b. ☐
c. ☐
d. ☐

10. You should take a bath _____.
    a. every day
    b. once a week
    c. once a year
    d. once a month

10a. ☐
b. ☐
c. ☐
d. ☐

305

1. What things are made of is called _____.
   a. molecules
   b. matter
   c. chemistry
   d. property

1a. ☐
b. ☐
c. ☐
d. ☐

2. A chemist is a scientist who studies _____.
   a. about plants
   b. about matter
   c. about stars
   d. about animals

2a. ☐
b. ☐
c. ☐
d. ☐

3. A chemist who believed in God and served Him was _____.
   a. Isaac Newton
   b. Ronald Boyd
   c. Robert Boyle
   d. Charles Brown

3a. ☐
b. ☐
c. ☐
d. ☐

4. The shape and size of a ball are its _____.
   a. matter
   b. mass
   c. gravity
   d. properties

4a. ☐
b. ☐
c. ☐
d. ☐

5. The properties of a tomato are _____.
   a. soft, smooth, round
   b. long, hard, light
   c. hard, rough, heavy
   d. liquid, clear, wet

5a. ☐
b. ☐
c. ☐
d. ☐

6. The list of words that names matter and properties is _____.
   a. horse, ball, desk, hair
   b. ball, round, pencil, hard
   c. clear, big, smooth, heavy
   d. solid, liquid, gas, gravity

6a. ☐
b. ☐
c. ☐
d. ☐

7. When matter has a fixed size and shape it is called a _____.
   a. liquid
   b. gas
   c. solid
   d. molecule

7a. ☐
b. ☐
c. ☐
d. ☐

8. When matter is invisible (cannot been seen), it is usually a _____.
   a. liquid
   b. gas
   c. solid
   d. molecule

8a. ☐
b. ☐
c. ☐
d. ☐

9. When the shape of matter changes but stays the same size, it is called a _____.
   a. liquid
   b. volume
   c. invisible
   d. molecules

9a. ☐
b. ☐
c. ☐
d. ☐

10. When a liquid freezes it becomes a _____.
    a. gas
    b. drink
    c. solid
    d. rock

10a. ☐
b. ☐
c. ☐
d. ☐

306

1. All sounds are _____.
   a. loud noises
   b. talking
   c. vibrations
   d. colors

1a. ☐
b. ☐
c. ☐
d. ☐

2. Sounds travel in _____.
   a. waves
   b. light
   c. color
   d. tubes

2a. ☐
b. ☐
c. ☐
d. ☐

3. Strong vibrations make _____.
   a. soft sounds
   b. loud sounds
   c. no sounds
   d. music

3a. ☐
b. ☐
c. ☐
d. ☐

4. You hear when sound reaches your _____.
   a. skin
   b. brain
   c. eyes
   d. eardrum

4a. ☐
b. ☐
c. ☐
d. ☐

5. When you hear, sound hits the eardrum, passes to three bones in the middle ear, then to the _____.
   a. brain, the nerves, and the outer ear
   b. nerves, the head, and the inner ear
   c. inner ear, the eyes, and the head
   d. inner ear, the nerves, and the brain

5a. ☐
b. ☐
c. ☐
d. ☐

6. Sound causes your eardrum to _____.
   a. get bigger
   b. get smaller
   c. vibrate
   d. break

6a. ☐
b. ☐
c. ☐
d. ☐

7. The larynx helps you _____.
   a. hear
   b. speak
   c. see
   d. taste

7a. ☐
b. ☐
c. ☐
d. ☐

8. The larynx is in your _____.
   a. ear
   b. throat
   c. eyes
   d. tongue

8a. ☐
b. ☐
c. ☐
d. ☐

9. A whisper sends sound waves that are _____.
   a. strong
   b. weak
   c. straight
   d. slower

9a. ☐
b. ☐
c. ☐
d. ☐

10. Nerves take the message to the _____.
    a. eardrum
    b. brain
    c. hand
    d. heart

10a. ☐
b. ☐
c. ☐
d. ☐

1. A day and a night together was first called a day by _____.
   a. God
   b. scientists
   c. teachers
   d. Adam
2. The earth rotates on its axis once every _____.
   a. 365 days
   b. 3 months
   c. 24 hours
   d. week
3. When you are having day, people on the other side of the earth are having _____.
   a. summer
   b. night
   c. day, too
   d. winter
4. The seasons in order are _____.
   a. spring, summer, fall, winter
   b. summer, fall, spring, winter
   c. winter, spring, fall, summer
   d. summer, winter, spring, fall
5. We have seasons because the earth is tilted on its axis and it _____.
   a. rotates on its axis
   b. revolves around the sun
   c. moves up and down
   d. is close to the sun
6. For the earth to revolve once around the sun, it takes _____.
   a. 24 hours
   b. one week
   c. one month
   d. 365 days
7. There are four time zones in the United States called _____.
   a. Eastern, Central, Southern, Pacific
   b. Central, Southern, Pacific, Atlantic
   c. Pacific, Atlantic, Mountain, Desert
   d. Eastern, Central, Mountain, Pacific
8. Each time zone is equal to _____.
   a. two hours
   b. one hour
   c. three hours
   d. ten minutes
9. There are time zones on the earth because _____.
   a. the earth turns or rotates
   b. the earth revolves around the sun
   c. the earth stands still
   d. the sun moves
10. You know the day, month, and year from a _____.
    a. clock
    b. calendar
    c. map
    d. ruler

307

1a. ☐
b. ☐
c. ☐
d. ☐

2a. ☐
b. ☐
c. ☐
d. ☐

3a. ☐
b. ☐
c. ☐
d. ☐

4a. ☐
b. ☐
c. ☐
d. ☐

5a. ☐
b. ☐
c. ☐
d. ☐

6a. ☐
b. ☐
c. ☐
d. ☐

7a. ☐
b. ☐
c. ☐
d. ☐

8a. ☐
b. ☐
c. ☐
d. ☐

9a. ☐
b. ☐
c. ☐
d. ☐

10a. ☐
b. ☐
c. ☐
d. ☐

308

1. Rocks are formed by _____.
   a. heat and water
   b. wind and pressure
   c. heat and pressure
   d. man and animals

1a. ☐
b. ☐
c. ☐
d. ☐

2. Rocks are changed in size and shape by _____.
   a. water, wind, plants, and birds
   b. water, wind, heat and cold, and plants
   c. man, wind, pressure, and chemists
   d. matter, pressure, vibrations, and volcanoes

2a. ☐
b. ☐
c. ☐
d. ☐

3. Many rocks were once _____.
   a. granite
   b. magma
   c. pebbles
   d. water

3a. ☐
b. ☐
c. ☐
d. ☐

4. Granite is an example of _____.
   a. metamorphic rock
   b. sedimentary rock
   c. igneous rock
   d. lava rock

4a. ☐
b. ☐
c. ☐
d. ☐

5. Limestone is an example of _____.
   a. metamorphic rock
   b. sedimentary rock
   c. igneous rock
   d. lava rock

5a. ☐
b. ☐
c. ☐
d. ☐

6. Melted rock that flows from a volcano is called _____.
   a. lava
   b. magma
   c. granite
   d. igneous

6a. ☐
b. ☐
c. ☐
d. ☐

7. Scientists who study rocks are called _____.
   a. biologists
   b. chemists
   c. archaeologists
   d. geologists

7a. ☐
b. ☐
c. ☐
d. ☐

8. Rocks can be used for _____.
   a. statues and food
   b. statues and buildings
   c. jewelry and plants
   d. enjoyment and soup

8a. ☐
b. ☐
c. ☐
d. ☐

9. The faces of four Presidents are carved out of granite at _____.
   a. Mount Whitney
   b. New York City
   c. Yellowstone National Park
   d. Mount Rushmore

9a. ☐
b. ☐
c. ☐
d. ☐

10. Most rocks are made up of tiny crystals called _____.
    a. ice
    b. metals
    c. minerals
    d. salt

10a. ☐
b. ☐
c. ☐
d. ☐

309

1. Light from the sun is changed into heat energy when the light is _____.
   a. absorbed
   b. transparent
   c. heated
   d. cooled

1a. ☐
b. ☐
c. ☐
d. ☐

2. Rubbing your hands together quickly to make them warm is an example of heat energy caused by _____.
   a. electricity
   b. fuel
   c. fire
   d. friction

2a. ☐
b. ☐
c. ☐
d. ☐

3. A fire makes heat energy from _____.
   a. fuel and friction
   b. oxygen and electricity
   c. fuel and oxygen
   d. static electricity and friction

3a. ☐
b. ☐
c. ☐
d. ☐

4. Heat energy causes a solid to _____.
   a. change to a liquid or a gas
   b. stay the same
   c. move from place to place
   d. contract

4a. ☐
b. ☐
c. ☐
d. ☐

5. Heat energy causes molecules to _____.
   a. slow down
   b. vibrate more quickly
   c. stay together
   d. radiate

5a. ☐
b. ☐
c. ☐
d. ☐

6. A very good conductor of heat is _____.
   a. wax
   b. wood
   c. copper
   d. air

6a. ☐
b. ☐
c. ☐
d. ☐

7. Keeping warm is a benefit of _____.
   a. water
   b. molecules
   c. sleep
   d. heat energy

7a. ☐
b. ☐
c. ☐
d. ☐

8. Most of the heat on the earth comes from _____.
   a. fire
   b. the sun
   c. fuel
   d. electricity

8a. ☐
b. ☐
c. ☐
d. ☐

9. Too much heat energy can cause problems of _____.
   a. pollution and garbage
   b. overweight and lack of food
   c. pollution and sunburn
   d. no water and too much fuel

9a. ☐
b. ☐
c. ☐
d. ☐

10. To take up more space is to _____.
    a. expand
    b. contract
    c. extract
    d. conduct

10a. ☐
b. ☐
c. ☐
d. ☐

1. The hot liquid rock that rises from deep within the earth is called _____.
   a. granite
   b. limestone
   c. magma
   d. igneous
2. An example of a gas is _____.
   a. ice
   b. water vapor
   c. gum
   d. dirt
3. In leap year, February has _____.
   a. 28 days
   b. 29 days
   c. 30 days
   d. 31 days
4. If it gets too cold, plants will _____.
   a. die
   b. grow faster
   c. live longer
   d. cry
5. A hearing aid makes the vibrations _____.
   a. weaker
   b. slower
   c. faster
   d. stronger
6. Molecules can only be seen with a _____.
   a. telescope
   b. microscope
   c. pair of glasses
   d. horoscope
7. Only humans have _____.
   a. a body
   b. a conscience
   c. eyes
   d. a nose
8. Matter has weight and takes up _____.
   a. space
   b. time
   c. money
   d. color
9. In order to breathe, fish use _____.
   a. air tanks
   b. pores
   c. lungs
   d. gills
10. Energy from the sun is _____.
    a. fuel energy
    b. light energy
    c. radiant energy
    d. electrical energy

310

1a. ☐
b. ☐
c. ☐
d. ☐

2a. ☐
b. ☐
c. ☐
d. ☐

3a. ☐
b. ☐
c. ☐
d. ☐

4a. ☐
b. ☐
c. ☐
d. ☐

5a. ☐
b. ☐
c. ☐
d. ☐

6a. ☐
b. ☐
c. ☐
d. ☐

7a. ☐
b. ☐
c. ☐
d. ☐

8a. ☐
b. ☐
c. ☐
d. ☐

9a. ☐
b. ☐
c. ☐
d. ☐

10a. ☐
b. ☐
c. ☐
d. ☐

401

1. The four main parts of a plant are the roots, stem, _____.
   a. leaves, and bark
   b. leaves, and flowers
   c. leaves, and trunk
   d. sepal, and branches

1a. ☐
b. ☐
c. ☐
d. ☐

2. The part of a plant that holds up the plant is called the _____.
   a. the leaves
   b. the flowers
   c. the stem
   d. the branches

2a. ☐
b. ☐
c. ☐
d. ☐

3. The part of a plant that holds the plant in the ground is _____.
   a. the roots
   b. the flowers
   c. the stem
   d. the branches

3a. ☐
b. ☐
c. ☐
d. ☐

4. The plant takes in water and minerals from the soil through its _____.
   a. flowers
   b. leaves
   c. root hairs
   d. nose

4a. ☐
b. ☐
c. ☐
d. ☐

5. Plants give off _____.
   a. carbon dioxide
   b. funny smells
   c. oxygen
   d. light

5a. ☐
b. ☐
c. ☐
d. ☐

6. The bud of a plant is a part of _____.
   a. the root
   b. the pollen
   c. the stem
   d. the chlorophyll

6a. ☐
b. ☐
c. ☐
d. ☐

7. The pea plant stores food in _____.
   a. the seeds
   b. the ground
   c. the roots
   d. the stem

7a. ☐
b. ☐
c. ☐
d. ☐

8. The roots of beets and carrots are storehouses for _____.
   a. bulbs
   b. fruit
   c. school
   d. food

8a. ☐
b. ☐
c. ☐
d. ☐

9. Plants make food in their _____.
   a. flowers
   b. leaves
   c. fruit
   d. seeds

9a. ☐
b. ☐
c. ☐
d. ☐

10. Some plants store food they make in the fruit or in the _____.
    a. roots
    b. flowers
    c. bark
    d. ground

10a. ☐
b. ☐
c. ☐
d. ☐

402

1. Cats are meat-eaters while sheep eat _____.
   a. birds
   b. cheeses
   c. plants
   d. people

1a. ☐
b. ☐
c. ☐
d. ☐

2. Whales breathe through their _____.
   a. mouth and gills
   b. lungs and nose
   c. lungs and gills
   d. gills and skin

2a. ☐
b. ☐
c. ☐
d. ☐

3. Animals with long, sharp teeth are usually _____.
   a. meat-eaters
   b. young
   c. plant-eaters
   d. old

3a. ☐
b. ☐
c. ☐
d. ☐

4. Sheep have no _____.
   a. wool on their head
   b. cutting teeth on their upper jaw
   c. tongue in their mouth
   d. muscles in their body

4a. ☐
b. ☐
c. ☐
d. ☐

5. The largest mammal is the _____.
   a. shrew
   b. elephant
   c. shark
   d. whale

5a. ☐
b. ☐
c. ☐
d. ☐

6. Salmon are born in a _____.
   a. cave
   b. spawning ground
   c. nest
   d. hospital

6a. ☐
b. ☐
c. ☐
d. ☐

7. An ostrich egg is kept warm by _____.
   a. the male
   b. the female
   c. both the male and the female
   d. a large wool blanket

7a. ☐
b. ☐
c. ☐
d. ☐

8. Crickets sing with their _____.
   a. mouths
   b. tongues
   c. legs
   d. wings

8a. ☐
b. ☐
c. ☐
d. ☐

9. A man-made place of protection for birds is a _____.
   a. sanctuary
   b. flock
   c. net
   d. extinct

9a. ☐
b. ☐
c. ☐
d. ☐

10. A group that helps educate people about protecting wildlife is the _____.
    a. library guild
    b. Audubon Society
    c. future farmers
    d. church

10a. ☐
b. ☐
c. ☐
d. ☐

403

1. The four God-given resources most living things need are _____.
   a. food, water, air, and heat — 1a. ☐
   b. light, water, fire, and gas — b. ☐
   c. water, air, light, and soil — c. ☐
   d. food, air, clothes, and homes — d. ☐
2. Light and heat come from _____.
   a. the earth — 2a. ☐
   b. the sun — b. ☐
   c. within — c. ☐
   d. the moon — d. ☐
3. Energy from the sun helps you grow through a _____.
   a. food chain — 3a. ☐
   b. water cycle — b. ☐
   c. decay cycle — c. ☐
   d. growth cycle — d. ☐
4. The missing part of this food chain is you, milk, cow, grass, and _____.
   a. farmer — 4a. ☐
   b. dairy — b. ☐
   c. sun — c. ☐
   d. trucks — d. ☐
5. Animals that feed on other animals are called _____.
   a. producers — 5a. ☐
   b. predators — b. ☐
   c. ecologists — c. ☐
   d. decomposers — d. ☐
6. To have a balance of nature in a community there must be _____.
   a. predators — 6a. ☐
   b. ecologists — b. ☐
   c. people — c. ☐
   d. plants — d. ☐
7. To keep living, all living things depend on _____.
   a. themselves — 7a. ☐
   b. animals — b. ☐
   c. each other — c. ☐
   d. the planets — d. ☐
8. Human communities need plant and animal communities to live, but human communities are special because _____.
   a. man is made in God's image — 8a. ☐
   b. man has legs — b. ☐
   c. man has instinct — c. ☐
   d. man can make his own food — d. ☐
9. To increase the water supply, you can _____.
   a. replant forests — 9a. ☐
   b. stop drinking water — b. ☐
   c. drain the swamps — c. ☐
   d. make it rain more often — d. ☐
10. National parks _____.
    a. are only for rocks — 10a. ☐
    b. preserve some natural treasures — b. ☐
    c. are private — c. ☐
    d. are a thing of the past — d. ☐

☐

404

1. The ability to do work is called _____.
   a. energy
   b. gravity
   c. matter
   d. machines

1a. ☐
b. ☐
c. ☐
d. ☐

2. The force that causes things which are in motion to stop is called _____.
   a. energy
   b. gravity
   c. friction
   d. work

2a. ☐
b. ☐
c. ☐
d. ☐

3. Four kinds of energy are _____.
   a. light, sound, heat, and water
   b. light, water, heat, and snow
   c. fire, water, ice and sun
   d. light, sound, heat, and electricity

3a. ☐
b. ☐
c. ☐
d. ☐

4. A pitcher standing still with a ball in his hand is an example of _____.
   a. energy in action
   b. stored action
   c. stored energy
   d. no energy

4a. ☐
b. ☐
c. ☐
d. ☐

5. A ramp is a simple machine called _____.
   a. a lever
   b. a wedge
   c. a screw
   d. an inclined plane

5a. ☐
b. ☐
c. ☐
d. ☐

6. The six simple machines are _____.
   a. a wheel and axle, a pulley, a lever, a wedge, a screw, and an inclined plane
   b. a wheel and axle, a fulcrum, a lever, a force, a wedge, and energy
   c. a force, a wedge, energy, friction, gravity, and a pulley
   d. a pulley, a block and tackle, a wheel and axle, a wheel-barrow, an inclined plane, and a screw

6a. ☐
b. ☐
c. ☐
d. ☐

7. A doorknob is a _____.
   a. pulley
   b. wheel and axle
   c. screw
   d. force

7a. ☐
b. ☐
c. ☐
d. ☐

8. Raising a flag on a flagpole is done by the use of a _____.
   a. screw
   b. hammer
   c. ladder
   d. pulley

8a. ☐
b. ☐
c. ☐
d. ☐

9. A tractor is an example of a _____.
   a. simple machine
   b. complex machine
   c. small machine
   d. wedge

9a. ☐
b. ☐
c. ☐
d. ☐

10. A complex machine used for transportation is a _____.
    a. mixer
    b. typewriter
    c. horse
    d. jet plane

10a. ☐
b. ☐
c. ☐
d. ☐

1. Materials that carry electricity from place to place are called _____.
   a. currents
   b. insulators
   c. conductors
   d. electrons
2. Electricity will not flow through _____.
   a. water
   b. a circuit
   c. a magnet
   d. an insulator
3. The track along which electricity flows is called _____.
   a. the round trip
   b. the electric track
   c. the circuit
   d. the current
4. Electricity is used _____.
   a. in homes
   b. in stores
   c. in hospitals
   d. in all of these
5. Anything that a magnet will not attract is called _____.
   a. magnetic
   b. plants
   c. nonmagnetic
   d. metal
6. The ends of a magnet are called its _____.
   a. spikes
   b. current
   c. bars
   d. poles
7. When electric current passes through a coiled wire, it makes _____.
   a. a spark
   b. an electromagnet
   c. a generator
   d. an electric cell
8. A doorbell is made with _____.
   a. a generator
   b. a fuse
   c. an electromagnet
   d. an electrode
9. An electrical switch is a _____.
   a. coil
   b. circuit breaker
   c. conductor
   d. magnetic pole
10. Electric cells are used to make _____.
    a. lightning
    b. static electricity
    c. toasters
    d. current electricity

405

1a. ☐
b. ☐
c. ☐
d. ☐

2a. ☐
b. ☐
c. ☐
d. ☐

3a. ☐
b. ☐
c. ☐
d. ☐

4a. ☐
b. ☐
c. ☐
d. ☐

5a. ☐
b. ☐
c. ☐
d. ☐

6a. ☐
b. ☐
c. ☐
d. ☐

7a. ☐
b. ☐
c. ☐
d. ☐

8a. ☐
b. ☐
c. ☐
d. ☐

9a. ☐
b. ☐
c. ☐
d. ☐

10a. ☐
b. ☐
c. ☐
d. ☐

406

1. The two types of thermometers most commonly used are _____.
   a. Fahrenheit and Central
   b. Celsius and Centigrade
   c. Celsius and Fahrenheit
   d. water and gas

1a. ☐
b. ☐
c. ☐
d. ☐

2. Water boils at _____.
   a. 32° F
   b. 100° C
   c. 0° C
   d. 100° F

2a. ☐
b. ☐
c. ☐
d. ☐

3. When heat is applied to ice, it will _____.
   a. turn to snow
   b. stick to whatever it is sitting on
   c. turn to water and evaporate
   d. turn to gas

3a. ☐
b. ☐
c. ☐
d. ☐

4. Food is carried to all parts of the bodies of animals and plants by _____.
   a. blood
   b. water
   c. evaporation
   d. drinking

4a. ☐
b. ☐
c. ☐
d. ☐

5. If a material will dissolve, it is _____.
   a. insoluble
   b. 32° F
   c. a suspension
   d. soluble

5a. ☐
b. ☐
c. ☐
d. ☐

6. A material that will not dissolve in water is _____.
   a. salt
   b. sugar
   c. oil
   d. coffee

6a. ☐
b. ☐
c. ☐
d. ☐

7. Anything that has weight and takes up space is called _____.
   a. atoms
   b. elements
   c. molecules
   d. matter

7a. ☐
b. ☐
c. ☐
d. ☐

8. Air is usually found as _____.
   a. a solid
   b. a liquid
   c. a gas
   d. an element

8a. ☐
b. ☐
c. ☐
d. ☐

9. The building blocks of molecules are called _____.
   a. elements
   b. liquids
   c. moles
   d. atoms

9a. ☐
b. ☐
c. ☐
d. ☐

10. Hydrogen and oxygen are _____.
    a. liquids
    b. elements
    c. properties
    d. solutions

10a. ☐
b. ☐
c. ☐
d. ☐

407

1. We live in an ocean of _____.
   a. fog
   b. water
   c. air
   d. steam

1a. ☐
b. ☐
c. ☐
d. ☐

2. The layer of ozone in the earth's atmosphere protects people against _____.
   a. harmless sun rays
   b. beneficial sun rays
   c. ultraviolet sun rays
   d. visible sun rays

2a. ☐
b. ☐
c. ☐
d. ☐

3. Weather changes are sometimes caused by _____.
   a. temperature, air pressure, air movement, and moisture
   b. temperature, mothers, and weathermen
   c. electrons, air pressure, and magnetism
   d. moisture, gravity, and rotation of the earth

3a. ☐
b. ☐
c. ☐
d. ☐

4. To water the earth God provided the _____.
   a. ozone
   b. lightning
   c. decay cycle
   d. water cycle

4a. ☐
b. ☐
c. ☐
d. ☐

5. A storm of snow-carrying high winds is a _____.
   a. hailstorm
   b. hurricane
   c. blizzard
   d. rainstorm

5a. ☐
b. ☐
c. ☐
d. ☐

6. Heavy winds carrying sand is a _____.
   a. hailstorm
   b. sandstorm
   c. blizzard
   d. tornado

6a. ☐
b. ☐
c. ☐
d. ☐

7. When forces of weather change the earth's surface, these changes are called _____.
   a. weather changes
   b. geographic changes
   c. erosion
   d. day and night

7a. ☐
b. ☐
c. ☐
d. ☐

8. The moon has no _____.
   a. dust
   b. rocks
   c. light
   d. atmosphere

8a. ☐
b. ☐
c. ☐
d. ☐

9. To predict or forecast the weather, weathermen use _____.
   a. atmosphere
   b. guesses
   c. instruments
   d. air pressure

9a. ☐
b. ☐
c. ☐
d. ☐

10. Air pressure is measured with a _____.
    a. thermometer
    b. wind vane
    c. anemometer
    d. barometer

10a. ☐
b. ☐
c. ☐
d. ☐

☐

408

1. The two planets nearest the sun are _____.
   a. Mars and Mercury
   b. Mercury and Mars
   c. Mercury and Venus
   d. Mercury and Earth

1a. ☐
b. ☐
c. ☐
d. ☐

2. The farthest planet from the sun is _____.
   a. Jupiter
   b. Pluto
   c. Mars
   d. Saturn

2a. ☐
b. ☐
c. ☐
d. ☐

3. The center of the solar system is _____.
   a. the moon
   b. the earth
   c. the sun
   d. the galaxy

3a. ☐
b. ☐
c. ☐
d. ☐

4. The universe began when _____.
   a. gravity started it
   b. God created it
   c. stars were born
   d. it just happened

4a. ☐
b. ☐
c. ☐
d. ☐

5. Heavenly bodies that look like a star with a tail are called _____.
   a. asteroids
   b. comets
   c. moons
   d. meteors

5a. ☐
b. ☐
c. ☐
d. ☐

6. Small planet like objects in orbit between Mars and Jupiter are _____.
   a. asteroids
   b. comets
   c. moons
   d. meteors

6a. ☐
b. ☐
c. ☐
d. ☐

7. A group of stars that seem to make a picture in the sky is called _____.
   a. an asteroid
   b. a galaxy
   c. the Milky Way
   d. a constellation

7a. ☐
b. ☐
c. ☐
d. ☐

8. The Wise Men were led to Jesus by _____.
   a. a constellation
   b. an angel
   c. the Star of the East
   d. the Bible

8a. ☐
b. ☐
c. ☐
d. ☐

9. Galileo and Lippershey are famous astronomers who made the first _____.
   a. satellites
   b. telescopes
   c. radios
   d. spectroscopes

9a. ☐
b. ☐
c. ☐
d. ☐

10. The Bible says that in the future _____.
    a. we will all live on Mars
    b. the moon will split in two
    c. there will be a new heaven and a new earth
    d. the sun will revolve around the earth

10a. ☐
b. ☐
c. ☐
d. ☐

☐

409

1. The amount of the earth's surface that is covered by water is _____.
   a. one-fourth — 1a. ☐
   b. one-half — b. ☐
   c. almost three-fourths — c. ☐
   d. all of it — d. ☐
2. All weather occurs in the _____.
   a. troposphere — 2a. ☐
   b. ionosphere — b. ☐
   c. stratosphere — c. ☐
   d. sphere — d. ☐
3. The very center of the earth is called the _____.
   a. crust — 3a. ☐
   b. mantle — b. ☐
   c. core — c. ☐
   d. hydrosphere — d. ☐
4. The surface of the earth is called the _____.
   a. mantle — 4a. ☐
   b. core — b. ☐
   c. crust — c. ☐
   d hydrosphere — d. ☐
5. The earth is shaped like _____.
   a. a cylinder — 5a. ☐
   b. a sphere — b. ☐
   c. an oval — c. ☐
   d. an eclipse — d. ☐
6. At the poles of the earth, the earth's forces are greater. These forces are called _____.
   a. mechanical and electrical — 6a. ☐
   b. gravity and energy — b. ☐
   c. magnetism and gravity — c. ☐
   d. water and heat — d. ☐
7. God created animals and man on the _____.
   a. first day of Creation — 7a. ☐
   b. sixth day of Creation — b. ☐
   c. seventh day of Creation — c. ☐
   d. fourth day of Creation — d. ☐
8. God created day and night on the _____.
   a. first day of Creation — 8a. ☐
   b. sixth day of Creation — b. ☐
   c. third day of Creation — c. ☐
   d. fourth day of Creation — d. ☐
9. A crack in the earth's crust where layers of rocks have slipped or moved is called _____.
   a. valley — 9a. ☐
   b. mountain — b. ☐
   c. volcano — c. ☐
   d. fault — d. ☐
10. When part of the earth moves quickly and shakes, it is called _____.
    a. an earthquake — 10a. ☐
    b. a fault — b. ☐
    c. a volcano — c. ☐
    d. a rockslide — d. ☐

410

1. Living things in order to live need air, water, and _____.
   a. clothes — 1a. ☐
   b. houses — b. ☐
   c. food — c. ☐
   d. exercise — d. ☐
2. Bees live in a _____.
   a. house — 2a. ☐
   b. pond — b. ☐
   c. hive — c. ☐
   d. hole — d. ☐
3. God has given to many animals a guide called _____.
   a. flight — 3a. ☐
   b. fear — b. ☐
   c. instinct — c. ☐
   d. extinct — d. ☐
4. The study of how living things affect their environment and each other is called _____.
   a. biology — 4a. ☐
   b. ecology — b. ☐
   c. geology — c. ☐
   d. archaeology — d. ☐
5. Two or more simple machines put together to make one is a _____.
   a. big machine — 5a. ☐
   b. bad idea — b. ☐
   c. complex machine — c. ☐
   d. wheel and axle — d. ☐
6. A machine that makes electricity is _____.
   a. a conductor — 6a. ☐
   b. an insulator — b. ☐
   c. a generator — c. ☐
   d. a magnet — d. ☐
7. Solid, liquid, and gas are three forms of _____.
   a. elements — 7a. ☐
   b. matter — b. ☐
   c. solvents — c. ☐
   d. molecules — d. ☐
8. The wearing down of rocks and soil by weather is called _____.
   a. erosion — 8a. ☐
   b. irrigation — b. ☐
   c. fertilizer — c. ☐
   d. a cycle — d. ☐
9. A false science that says the stars can tell the future is called _____.
   a. astronomy — 9a. ☐
   b. astrology — b. ☐
   c. biology — c. ☐
   d. gravity — d. ☐
10. The force that pulls everything toward the center of the earth is called _____.
    a. electricity — 10a. ☐
    b. magnetism — b. ☐
    c. rotation — c. ☐
    d. gravity — d. ☐

☐

501

1. The unit of life for all living things is called a _____.
   a. membrane
   b. living organism
   c. cell
   d. breath

1a. ☐
b. ☐
c. ☐
d. ☐

2. The living substance in a cell is called _____.
   a. cytoplasm
   b. blood
   c. nucleus
   d. nutrients

2a. ☐
b. ☐
c. ☐
d. ☐

3. Two types of cells are plant cells and _____ cells.
   a. nonliving
   b. large
   c. organic
   d. animal

3a. ☐
b. ☐
c. ☐
d. ☐

4. Cells which carry messages about what is happening inside and outside of the body are called _____.
   a. cell walls
   b. nerve cells
   c. muscle cells
   d. blood cells

4a. ☐
b. ☐
c. ☐
d. ☐

5. Both plants and animals are protected by _____.
   a. shade
   b. water
   c. epithelial tissue
   d. blood cells

5a. ☐
b. ☐
c. ☐
d. ☐

6. To each organism God provided cells of various sizes and _____.
   a. colors
   b. shapes
   c. origins
   d. energy

6a. ☐
b. ☐
c. ☐
d. ☐

7. Psalm 139:14 says that we are _____ made.
   a. accidentally
   b. strongly
   c. wonderfully
   d. quickly

7a. ☐
b. ☐
c. ☐
d. ☐

8. God gives man physical life through cells and eternal life through _____.
   a. faith
   b. cells
   c. church
   d. good deeds

8a. ☐
b. ☐
c. ☐
d. ☐

9. Plants receive and use energy through a process called _____.
   a. breathing
   b. respiration
   c. food
   d. photosynthesis

9a. ☐
b. ☐
c. ☐
d. ☐

10. The cycle of energy which makes both plant and animal life possible is called the _____ cycle.
    a. oxygen
    b. carbon
    c. die
    d. organic

10a. ☐
b. ☐
c. ☐
d. ☐

502

1. The main stages in the life cycle of a plant are beginning stage, growth stage, and _____.
   a. life stage
   b. adult stage
   c. ending stage
   d. pollen stage

   1a. ☐ b. ☐ c. ☐ d. ☐

2. Choose the correct statement and write its letter in the blank. _____.
   a. A plant can be prevented from completing all stages in the life cycle.
   b. All plants have the same length of life cycle.
   c. All plants reproduce the same way.
   d. New plants are not important.

   2a. ☐ b. ☐ c. ☐ d. ☐

3. Some trees bear seeds inside fruit and some bear seeds inside _____.
   a. leaves
   b. pollen
   c. cones
   d. stalks

   3a. ☐ b. ☐ c. ☐ d. ☐

4. God has provided wind, bees, and insects to carry _____.
   a. pollen
   b. eggs
   c. leaves
   d. cones

   4a. ☐ b. ☐ c. ☐ d. ☐

5. Spores are formed in _____.
   a. ovaries
   b. anthers
   c. spore cases
   d. roots

   5a. ☐ b. ☐ c. ☐ d. ☐

6. Fungus plants are made up of tiny threads called _____.
   a. spores
   b. roots
   c. hairs
   d. hyphae

   6a. ☐ b. ☐ c. ☐ d. ☐

7. Algae is reproduced through _____.
   a. mitosis
   b. budding
   c. more spores
   d. fungus

   7a. ☐ b. ☐ c. ☐ d. ☐

8. One-celled plants are reproduced by _____.
   a. taking material from the parent cell
   b. seeds
   c. spores
   d. cones

   8a. ☐ b. ☐ c. ☐ d. ☐

9. The main difference among plants is _____.
   a. color
   b. the way they grow
   c. the way they are reproduced
   d. the way they take in food

   9a. ☐ b. ☐ c. ☐ d. ☐

10. All plants were created by _____.
    a. mitosis
    b. God
    c. seeds
    d. budding

    10a. ☐ b. ☐ c. ☐ d. ☐

☐

503

1. Animals that do not have backbones are called _____.
   a. hosts
   b. plants
   c. vertebrates
   d. invertebrates

1a. ☐
b. ☐
c. ☐
d. ☐

2. Flies, earthworms, and snails are examples of _____.
   a. vertebrates
   b. invertebrates
   c. mollusks
   d. fungi

2a. ☐
b. ☐
c. ☐
d. ☐

3. Egg-laying invertebrates begin life from _____.
   a. mitosis
   b. pollen
   c. an egg cell
   d. carbon

3a. ☐
b. ☐
c. ☐
d. ☐

4. The wormlike form in some insect life cycles is called _____.
   a. larva
   b. nymph
   c. adult
   d. an egg

4a. ☐
b. ☐
c. ☐
d. ☐

5. Two kinds of invertebrates are one-celled invertebrates and _____ invertebrates.
   a. two-celled
   b. egg-laying
   c. furry
   d. crawling

5a. ☐
b. ☐
c. ☐
d. ☐

6. One-celled animals have no _____.
   a. nucleus
   b. life cycle
   c. arms, legs, eyes, or heart
   d. cytoplasm

6a. ☐
b. ☐
c. ☐
d. ☐

7. All vertebrates begin their lives as fertilized _____.
   a. egg cells
   b. spores
   c. sperms
   d. larvae

7a. ☐
b. ☐
c. ☐
d. ☐

8. The life stages of vertebrates are adult stage, growth stage, and _____.
   a. embryo stage
   b. egg stage
   c. beginning stage
   d. last stage

8a. ☐
b. ☐
c. ☐
d. ☐

9. The vertebrates which lay eggs outside their bodies are fish, amphibians, reptiles, and _____.
   a. insects
   b. mollusks
   c. mammals
   d. birds

9a. ☐
b. ☐
c. ☐
d. ☐

10. All mammals have fur or _____.
    a. hair
    b. feathers
    c. scales
    d. gills

10a. ☐
b. ☐
c. ☐
d. ☐

504

1. Two cycles in nature's web of life are the carbon cycle and the _____ cycle.
   a. energy
   b. water
   c. food
   d. heat

1a. ☐
b. ☐
c. ☐
d. ☐

2. Animals get water by drinking it or getting it from _____.
   a. sweating
   b. crying
   c. the food they eat
   d. dew

2a. ☐
b. ☐
c. ☐
d. ☐

3. An organism that makes its own food is a _____.
   a. producer
   b. consumer
   c. decomposer
   d. factory

3a. ☐
b. ☐
c. ☐
d. ☐

4. Second-order consumers eat mostly _____.
   a. plants
   b. animals
   c. decomposers
   d. soil

4a. ☐
b. ☐
c. ☐
d. ☐

5. Wolves are _____.
   a. first-order consumers
   b. second-order consumers
   c. decomposers
   d. producers

5a. ☐
b. ☐
c. ☐
d. ☐

6. Changes in the amount of _____ cause big changes in the prairie balance of nature.
   a. carbon dioxide
   b. rainfall
   c. minerals
   d. fertilizers

6a. ☐
b. ☐
c. ☐
d. ☐

7. Man has affected the balance of nature by _____.
   a. eating
   b. sleeping
   c. drinking
   d. polluting

7a. ☐
b. ☐
c. ☐
d. ☐

8. Man has affected the balance of nature by killing animals and _____.
   a. clearing plants and trees from the land
   b. feeding animals
   c. eating too much
   d. giving weather reports

8a. ☐
b. ☐
c. ☐
d. ☐

9. Humans were given responsibility over all other living things by _____.
   a. nature
   b. law
   c. God
   d. common sense

9a. ☐
b. ☐
c. ☐
d. ☐

10. One way to be a careful steward would be to _____.
    a. conserve water
    b. drive a car a lot
    c. disobey hunting and fishing laws
    d. litter

10a. ☐
b. ☐
c. ☐
d. ☐

☐

505

1. Anything that is moving has _____ energy.
   a. potential
   b. stored
   c. kinetic
   d. high

1a. ☐
b. ☐
c. ☐
d. ☐

2. All the energy for the earth is provided by _____.
   a. wind
   b. the sun
   c. storage
   d. movement

2a. ☐
b. ☐
c. ☐
d. ☐

3. A burning leaf gives off _____ energy.
   a. heat
   b. mechanical
   c. potential
   d. sound

3a. ☐
b. ☐
c. ☐
d. ☐

4. Lightning is a type of _____ energy.
   a. potential
   b. chemical
   c. electrical
   d. mechanical

4a. ☐
b. ☐
c. ☐
d. ☐

5. For work to happen, _____ is needed.
   a. energy
   b. a person
   c. the sun
   d. good weather

5a. ☐
b. ☐
c. ☐
d. ☐

6. Jesus' work in John, Chapter 6, was _____ work.
   a. spiritual
   b. mechanical
   c. potential
   d. electrical

6a. ☐
b. ☐
c. ☐
d. ☐

7. Burning can be _____ for useful work.
   a. misused
   b. controlled
   c. wasted
   d. stopped

7a. ☐
b. ☐
c. ☐
d. ☐

8. A machine which controls burning to provide useful work is a _____.
   a. furnace
   b. battery
   c. garden hose
   d. telephone

8a. ☐
b. ☐
c. ☐
d. ☐

9. Nuclear energy presents three main problems. Natural elements which are sources for nuclear fuel can be used up. The waste water from nuclear plants is very hot. The third problem is that _____.
   a. few people are qualified to work in the plants
   b. the rays given off by atomic reaction can be dangerous
   c. there is a law against using nuclear power
   d. nuclear power is not very useful

9a. ☐
b. ☐
c. ☐
d. ☐

10. One of the most pressing energy problems today is the shortage of _____.
    a. people
    b. oil
    c. money
    d. laws

10a. ☐
b. ☐
c. ☐
d. ☐

506

1. The earth before the Flood had _____ plants and animals according to the Bible.
   a. only a few — 1a. ☐
   b. two of each kind of — b. ☐
   c. a great number of — c. ☐
   d. no — d. ☐
2. According to the Bible, after it stopped raining, the Flood water covered the earth _____.
   a. forty days and forty nights — 2a. ☐
   b. nearly a year — b. ☐
   c. one day — c. ☐
   d. 100 years — d. ☐
3. Petrified wood and fossilized leaves show that earlier plants were _____.
   a. very small — 3a. ☐
   b. not green — b. ☐
   c. not plentiful — c. ☐
   d. of great size — d. ☐
4. Oil was formed from animals. Coal was formed from _____.
   a. plants and trees — 4a. ☐
   b. animals — b. ☐
   c. sunlight — c. ☐
   d. oil — d. ☐
5. After the Flood the world population _____.
   a. disappeared — 5a. ☐
   b. decreased — b. ☐
   c. grew — c. ☐
   d. learned to swim — d. ☐
6. The Bible tells about differences on the earth after the Flood _____.
   a. in great detail — 6a. ☐
   b. in clues but not much detail — b. ☐
   c. in several books — c. ☐
   d. in the New Testament — d. ☐
7. Fossils show that some animals _____.
   a. had not seen rain — 7a. ☐
   b. are extinct — b. ☐
   c. liked the cold — c. ☐
   d. made noise — d. ☐
8. To learn about changes in the earth, scientists study land movement, fossils, and _____.
   a. glaciers — 8a. ☐
   b. deserts — b. ☐
   c. crops — c. ☐
   d. roots — d. ☐
9. Physical records indicate that the continents are drifting. The event which could have started the continents drifting could be _____.
   a. the Flood — 9a. ☐
   b. earthquakes — b. ☐
   c. hurricanes — c. ☐
   d. pollution — d. ☐
10. An important cycle which started after the Flood is the _____.
    a. water cycle — 10a. ☐
    b. carbon cycle — b. ☐
    c. life cycle — c. ☐
    d. breathing cycle — d. ☐

507

1. When minerals have become hardened into rock forming a fossil, the fossil is called a(n) _____.
   a. print fossil
   b. original-remains fossil
   c. petrified fossil
   d. carbonized fossil

1a. ☐
b. ☐
c. ☐
d. ☐

2. Dinosaur foot prints are an example of _____.
   a. print fossils
   b. original-remains fossils
   c. petrified fossils
   d. carbonized fossils

2a. ☐
b. ☐
c. ☐
d. ☐

3. Original remains fossils have been protected from decay by amber, permafrost, oil, and _____.
   a. coal
   b. sediment
   c. wood
   d. weather

3a. ☐
b. ☐
c. ☐
d. ☐

4. Petrified bones, teeth, shells, and wood are hardened minerals that have replaced _____.
   a. sediment
   b. the living cells
   c. fossils
   d. decay

4a. ☐
b. ☐
c. ☐
d. ☐

5. Petrified bones, tusks, and teeth were found in _____.
   a. Alaska
   b. Arizona
   c. Massachusetts
   d. Ireland

5a. ☐
b. ☐
c. ☐
d. ☐

6. A well-known fossil deposit is located in Los Angeles, California. More than two hundred kinds of animals and plants have been identified here. This fossil deposit is known as the _____.
   a. Los Angeles deposit
   b. LaBrae Tar Pits
   c. Cumberland Bone Cave
   d. Gobi Desert

6a. ☐
b. ☐
c. ☐
d. ☐

7. Some scientists, who believe the earth is millions of years old, classify fossils according to _____.
   a. geological age
   b. the Flood
   c. types
   d. carbonization

7a. ☐
b. ☐
c. ☐
d. ☐

8. Fossil identification is made difficult when _____.
   a. complete fossils are found
   b. parts of fossils are broken or missing
   c. trained people look for them
   d. you have to dig for them

8a. ☐
b. ☐
c. ☐
d. ☐

9. Teeth can give clues about a fossilized animal's _____.
   a. eating habits
   b. brain size
   c. offspring
   d. age

9a. ☐
b. ☐
c. ☐
d. ☐

10. If good inferences are made from fossils, _____ can take place.
    a. science
    b. tests
    c. reconstruction
    d. building of museums

10a. ☐
b. ☐
c. ☐
d. ☐

508

1. The earth is shaped like _____.
   a. a sphere
   b. an oblong
   c. a football
   d. a square
2. The earth's landforms are _____.
   a. never changing
   b. constantly changing
   c. not important
   d. all alike
3. The outer layer of the earth is called the _____.
   a. shell
   b. mantle
   c. crust
   d. skin
4. Core material is thought to be mostly _____.
   a. iron and steel
   b. steel and nickel
   c. nickel and iron
   d. lead and zinc
5. Living bodies contain minerals. Minerals are not alive. When the bodies die, minerals can return to the earth. In Genesis 3:19 the Bible tells us, "...for _____ thou art, and to _____ you shall return."
   a. dust, dust
   b. water, water
   c. flesh, flesh
   d. bones, bones
6. Granite and basalt are _____ rocks.
   a. metamorphic
   b. igneous
   c. sedimentary
   d. elementary
7. Small pieces of rocks often break down further through _____.
   a. weathering
   b. irrigation
   c. folding
   d. volcanoes
8. A glacier is a _____.
   a. fierce storm
   b. lava eruption
   c. snow storm
   d. large moving mass of ice and snow
9. Weathering is a force that _____.
   a. builds landforms
   b. wears away landforms
   c. has little effect on landforms
   d. never occurs
10. Recent volcanoes have left landforms called _____.
    a. trees
    b. cone structures
    c. glaciers
    d. erosion

1a. ☐ b. ☐ c. ☐ d. ☐
2a. ☐ b. ☐ c. ☐ d. ☐
3a. ☐ b. ☐ c. ☐ d. ☐
4a. ☐ b. ☐ c. ☐ d. ☐
5a. ☐ b. ☐ c. ☐ d. ☐
6a. ☐ b. ☐ c. ☐ d. ☐
7a. ☐ b. ☐ c. ☐ d. ☐
8a. ☐ b. ☐ c. ☐ d. ☐
9a. ☐ b. ☐ c. ☐ d. ☐
10a. ☐ b. ☐ c. ☐ d. ☐

509

1. All matter takes up space. This property is called _____.
   a. weight
   b. presence
   c. volume
   d. brittleness

1a. ☐
b. ☐
c. ☐
d. ☐

2. Some matter has the property to _____.
   a. fly
   b. conduct
   c. create
   d. see

2a. ☐
b. ☐
c. ☐
d. ☐

3. Matter can be in the form of a solid, liquid, or _____.
   a. gas
   b. color
   c. powder
   d. spray

3a. ☐
b. ☐
c. ☐
d. ☐

4. Chemical changes in matter result from burning and _____.
   a. melting
   b. freezing
   c. rusting
   d. raining

4a. ☐
b. ☐
c. ☐
d. ☐

5. The smallest part of matter that can still exist without a chemical change is called a _____.
   a. molecule
   b. cell
   c. microscope
   d. particle

5a. ☐
b. ☐
c. ☐
d. ☐

6. All molecules are always _____.
   a. still
   b. green
   c. in motion
   d. learning

6a. ☐
b. ☐
c. ☐
d. ☐

7. One of the reasons we have seasons is because the earth is titled on its _____.
   a. axle
   b. axis
   c. equator
   d. latitudes

7a. ☐
b. ☐
c. ☐
d. ☐

8. The water cycle functions because the matter in water changes _____.
   a. forms
   b. properties
   c. minerals
   d. colors

8a. ☐
b. ☐
c. ☐
d. ☐

9. God's design for earth included _____.
   a. controls over it
   b. careless creation
   c. too much matter
   d. too little matter

9a. ☐
b. ☐
c. ☐
d. ☐

10. Water and land to support life were provided by _____.
    a. nature
    b. erosion
    c. God
    d. matter

10a. ☐
b. ☐
c. ☐
d. ☐

☐

510

1. Cells which are connected together and have similar functions are called _____.
   a. multicellular
   b. tissue
   c. groups
   d. gases

1a. ☐
b. ☐
c. ☐
d. ☐

2. Animals with backbones are called _____.
   a. backers
   b. brave
   c. vertebrates
   d. invertebrates

2a. ☐
b. ☐
c. ☐
d. ☐

3. The group of animals that live part of their lives on land and part of their lives in the water are called _____.
   a. frogs
   b. reptiles
   c. amphibians
   d. fish

3a. ☐
b. ☐
c. ☐
d. ☐

4. Stewardship involves being _____ living things.
   a. careless with
   b. careful with
   c. afraid of
   d. angry with

4a. ☐
b. ☐
c. ☐
d. ☐

5. Stored energy is known as _____.
   a. useless energy
   b. potential energy
   c. kinetic energy
   d. low energy

5a. ☐
b. ☐
c. ☐
d. ☐

6. If no movement takes place, _____ work is done.
   a. a lot of
   b. no
   c. a little
   d. easy

6a. ☐
b. ☐
c. ☐
d. ☐

7. Physical records suggest that sometime in the past the whole earth had _____.
   a. a similar climate
   b. a polar climate
   c. six different seasons
   d. no climate

7a. ☐
b. ☐
c. ☐
d. ☐

8. Fossils of plant and animal remains that have not decayed are called _____.
   a. print fossils
   b. original-remains fossils
   c. petrified fossils
   d. carbonized fossils

8a. ☐
b. ☐
c. ☐
d. ☐

9. Many mountains were formed by _____.
   a. the folding process
   b. erosion
   c. rain
   d. highway crews

9a. ☐
b. ☐
c. ☐
d. ☐

10. Matter can move. This property is called _____.
    a. mass
    b. bitterness
    c. inertia
    d. shape

10a. ☐
b. ☐
c. ☐
d. ☐

601

1. Study Diagram 1 of a leaf. The letter *Y* on the diagram labels the part of a leaf known as _____.
   a. the chloroplast
   b. the stomata
   c. the cuticle
   d. the spongy layer

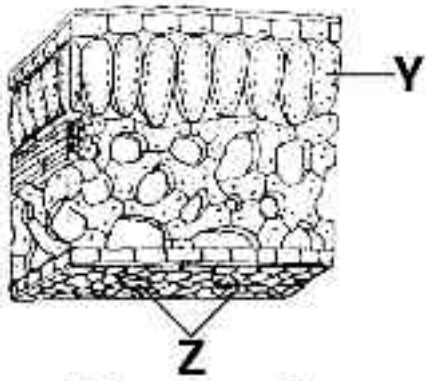


Diagram 1

2. Study Diagram 1. The letter *Z* on the diagram labels the part of a leaf known as _____.
   a. the chloroplast
   b. the stomata
   c. the cuticle
   d. the palisade layer
3. Photosynthesis requires chlorophyll, energy, and _____.
   a. nitrogen
   b. water
   c. sulfur
   d. magnesium
4. The leaf factory uses an animal by-product called _____.
   a. carbon dioxide
   b. oxygen
   c. nitrogen
   d. chlorophyll
5. The water and minerals flow up the root to the stem and leaves because of a _____.
   a. straw
   b. vacuum
   c. root hair
   d. pull of gravity
6. Water and minerals pass through the outside cell walls of the root from the _____.
   a. soil
   b. leaf
   c. stem
   d. grass
7. Leaves produce proteins, vitamins, and other foods. This food is transported by tubes called phloem to the _____.
   a. leaves
   b. atmosphere
   c. roots
   d. soil
8. The phloem and xylem are also parts of _____.
   a. a leaf
   b. the bark
   c. the soil
   d. a flower
9. Certain chemicals are produced naturally by plants. These chemicals _____.
   a. can kill the plants
   b. help the plants to grow properly
   c. slow plant growth down
   d. attract insects
10. The chemical 2, 4-D is an example of a helpful regulator. This chemical is used by man to _____.
    a. kill weeds
    b. poison animals
    c. fertilize gardens
    d. make plants green

1a. ☐ b. ☐ c. ☐ d. ☐

2a. ☐ b. ☐ c. ☐ d. ☐

3a. ☐ b. ☐ c. ☐ d. ☐

4a. ☐ b. ☐ c. ☐ d. ☐

5a. ☐ b. ☐ c. ☐ d. ☐

6a. ☐ b. ☐ c. ☐ d. ☐

7a. ☐ b. ☐ c. ☐ d. ☐

8a. ☐ b. ☐ c. ☐ d. ☐

9a. ☐ b. ☐ c. ☐ d. ☐

10a. ☐ b. ☐ c. ☐ d. ☐

602

1. Study Diagram 2. The letter *M* labels the part of the digestive system known as the _____.
   a. esophagus
   b. pancreas
   c. stomach
   d. liver

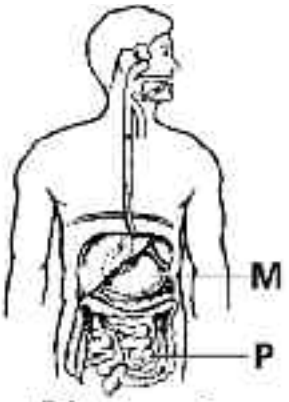


Diagram 2

2. Study Diagram 2. The letter *P* labels the part of the digestive system known as the _____.
   a. small intestine
   b. large intestine
   c. rectum
   d. appendix
3. In the small intestine digested food _____.
   a. dissolves into the blood
   b. turns into sugar
   c. becomes villi
   d. turns into a liquid
4. Gastric juice in the stomach _____.
   a. breaks down the tissues of meat
   b. is only present in birds
   c. lets the body know it's time to eat
   d. a, b, and c
5. All blood passes through the kidneys so that _____.
   a. poisons and waste can be filtered out
   b. blood cells can be counted
   c. sugars can be digested
   d. oxygen can be added
6. The blood cells which cause blood to clot are called _____.
   a. white blood cells
   b. red blood cells
   c. type AB
   d. platelets
7. The strongest muscle is the cardiac muscle which is the muscle of the _____.
   a. brain
   b. heart
   c. lungs
   d. mouth
8. Bones store _____.
   a. muscle
   b. calories
   c. calcium and phosphorous
   d. a, b, and c
9. Christians should keep their bodies healthy by _____.
   a. reading the Bible
   b. going to church
   c. witnessing
   d. maintaining habits of good diet, exercise, and cleanliness
10. Eating fish oils and getting plenty of sunshine help to prevent the bone disease called _____.
    a. rickets
    b. muscular dystrophy
    c. pneumonia
    d. a common cold

1a. ☐
b. ☐
c. ☐
d. ☐

2a. ☐
b. ☐
c. ☐
d. ☐

3a. ☐
b. ☐
c. ☐
d. ☐

4a. ☐
b. ☐
c. ☐
d. ☐

5a. ☐
b. ☐
c. ☐
d. ☐

6a. ☐
b. ☐
c. ☐
d. ☐

7a. ☐
b. ☐
c. ☐
d. ☐

8a. ☐
b. ☐
c. ☐
d. ☐

9a. ☐
b. ☐
c. ☐
d. ☐

10a. ☐
b. ☐
c. ☐
d. ☐

603

1. The part of the brain which allows us to see, smell, hear, taste, and feel is the _____.
   a. cerebrum
   b. cerebellum
   c. medulla
   d. cranium

1a. ☐
b. ☐
c. ☐
d. ☐

2. The part of the brain which is the center for breathing and the heartbeat is the _____.
   a. cerebrum
   b. cerebellum
   c. medulla
   d. cranium

2a. ☐
b. ☐
c. ☐
d. ☐

3. Bird migration is an example of _____.
   a. reflex
   b. instinct
   c. learned response
   d. intelligence

3a. ☐
b. ☐
c. ☐
d. ☐

4. A habit, such as reading your Bible daily, is an example of a (n) _____.
   a. reflex
   b. instinct
   c. learned response
   d. energy

4a. ☐
b. ☐
c. ☐
d. ☐

5. Plants seeking water is an example of _____.
   a. geotropism
   b. phototropism
   c. hydrotropism
   d. negative tropism

5a. ☐
b. ☐
c. ☐
d. ☐

6. Roots which grow downward into the soil are examples of _____.
   a. geotropism
   b. phototropism
   c. hydrotropism
   d. negative tropism

6a. ☐
b. ☐
c. ☐
d. ☐

7. The northernmost biome is _____.
   a. desert
   b. forest
   c. grassland
   d. tundra

7a. ☐
b. ☐
c. ☐
d. ☐

8. Two main groups of aquatic biomes are the marine biomes and the _____.
   a. fresh-water biomes
   b. tropical biomes
   c. desert biomes
   d. temperate biomes

8a. ☐
b. ☐
c. ☐
d. ☐

9. The transfer of the minerals of the earth to living organisms and then back to the earth again is called a _____.
   a. cycle
   b. chain
   c. circle
   d. response

9a. ☐
b. ☐
c. ☐
d. ☐

10. A balance of nature was established by God at the time of creation, and man _____.
    a. has continually worked to maintain this balance
    b. has had no influence on this balance of nature
    c. has done many things to destroy this balance of nature
    d. has been a good steward of God's creation

10a. ☐
b. ☐
c. ☐
d. ☐

604

1. The two special cells in male-female reproduction are the _____.
   a. sperm and egg
   b. spore and egg
   c. sperm and spore
   d. spore and pollen

1a. ☐
b. ☐
c. ☐
d. ☐

2. Two types of cells division which occur in male-female reproduction are reduction division and _____.
   a. osmosis
   b. tropism
   c. mitosis
   d. genetic

2a. ☐
b. ☐
c. ☐
d. ☐

3. The father of genetics is _____.
   a. George Washington
   b. Carl Correns
   c. Gregor Mendel
   d. Punnet Square

3a. ☐
b. ☐
c. ☐
d. ☐

4. Intelligence is not controlled by a single gene, but by several genes. This is known as _____.
   a. the principle of dominance
   b. multiple genes
   c. the Punnet Square
   d. incomplete dominance

4a. ☐
b. ☐
c. ☐
d. ☐

5. The parts of a reproductive cell which carry genes are called _____.
   a. genes
   b. chromosomes
   c. germs
   d. sperms

5a. ☐
b. ☐
c. ☐
d. ☐

6. Genes are made of _____.
   a. DNA
   b. chromosomes
   c. genes
   d. germs

6a. ☐
b. ☐
c. ☐
d. ☐

7. An albino is an example of _____.
   a. a mutation
   b. evolution
   c. a chromosome
   d. a transmission

7a. ☐
b. ☐
c. ☐
d. ☐

8. The color of a Siamese cat is an example of _____.
   a. mutation
   b. evolution
   c. the temperature of the environment affecting the genes for color
   d. a, b, and c

8a. ☐
b. ☐
c. ☐
d. ☐

9. The presence of DNA assures that cattle produce cattle, dogs produce dogs, and so forth. God established this law at the time of creation. In Genesis 1:24 He said, "...Let the earth bring forth the living creature after his kind, cattle, and creeping thing, and beast of the earth after his kind; and it was so." "After his kind" means _____.
   a. black dogs produce only black dogs and so forth
   b. dogs produce dogs and so forth
   c. female dogs produce only female dogs and so forth
   d. only kind and good creatures are produced

9a. ☐
b. ☐
c. ☐
d. ☐

10. Genetics, the science of heredity, _____ God's word.
    a. disproves
    b. questions
    c. agrees with
    d. contradicts

10a. ☐
b. ☐
c. ☐
d. ☐

605

1. A pure substance that cannot be broken down by ordinary chemical means is _____.
   a. an element
   b. matter
   c. a molecule
   d. a compound

1a. ☐
b. ☐
c. ☐
d. ☐

2. Molecules may be defined as the chemical combination of two or more _____.
   a. elements
   b. molecules
   c. protons
   d. atoms

2a. ☐
b. ☐
c. ☐
d. ☐

3. The weight of an atom comes from adding _____ together.
   a. molecules
   b. atoms
   c. protons and neutrons
   d. electrons and protons

3a. ☐
b. ☐
c. ☐
d. ☐

4. The atomic number given in the Periodic Chart is the number of _____.
   a. molecules
   b. protons in the nucleus
   c. neutrons in the nucleus
   d. electrons in the nucleus

4a. ☐
b. ☐
c. ☐
d. ☐

5. A shiny, lustrous material that conducts electricity and heat is _____.
   a. a metal
   b. a nonmetal
   c. a radioactive substance
   d. a rare earth element

5a. ☐
b. ☐
c. ☐
d. ☐

6. An element which is unstable and breaks down of its own accord is _____.
   a. a metal
   b. a nonmetal
   c. a radioactive substance
   d. a rare earth element

6a. ☐
b. ☐
c. ☐
d. ☐

7. Oxygen has 8 plus-charged protons. The number of minus-charged electrons in oxygen is _____.
   a. 4
   b. 8
   c. 2
   d. 16

7a. ☐
b. ☐
c. ☐
d. ☐

8. The atomic number of lithium is 3. The weight of lithium is 7. The lithium atom has 3 protons and _____ neutrons.
   a. 3
   b. 4
   c. 7
   d. 0

8a. ☐
b. ☐
c. ☐
d. ☐

9. Lemon juice is an example of _____.
   a. a base
   b. an acid
   c. an element
   d. an atom

9a. ☐
b. ☐
c. ☐
d. ☐

10. Baking soda is an example of _____.
    a. a base
    b. an acid
    c. an element
    d. an atom

10a. ☐
b. ☐
c. ☐
d. ☐

606

1. Sound waves are a series of compressions and _____.
   a. sessions
   b. rings
   c. rarefactions
   d. fractions

1a. ☐
b. ☐
c. ☐
d. ☐

2. Sound can be heard when sound waves cause vibrations on the _____.
   a. eardrum
   b. outer ear
   c. ear canal
   d. ear lobe

2a. ☐
b. ☐
c. ☐
d. ☐

3. The bottom part of a light wave is called the _____.
   a. crest
   b. trough
   c. low wave
   d. length

3a. ☐
b. ☐
c. ☐
d. ☐

4. Examples of radiations which cannot be seen by the human eye are _____.
   a. translucent and opaque
   b. photons and refraction
   c. electromagnetic spectrums
   d. ultraviolet rays and X rays

4a. ☐
b. ☐
c. ☐
d. ☐

5. God promised never to flood the earth again. As a reminder of this promise, he sent _____.
   a. less rain
   b. thunder
   c. a rainbow
   d. clouds

5a. ☐
b. ☐
c. ☐
d. ☐

6. A rainbow is visible because raindrops act as a _____.
   a. mirror
   b. prism
   c. light wave
   d. promise

6a. ☐
b. ☐
c. ☐
d. ☐

7. The man who discovered the colors that make up light is _____.
   a. Thomas Edison
   b. Benjamin Franklin
   c. Sir Isaac Newton
   d. Nero

7a. ☐
b. ☐
c. ☐
d. ☐

8. When the colors of light are mixed, they produce the color _____.
   a. red
   b. black
   c. white
   d. violet

8a. ☐
b. ☐
c. ☐
d. ☐

9. A red tablecloth appears red because _____.
   a. it absorbs all the red light in the spectrum
   b. it reflects only the red light back to the eye
   c. a blue dye has been used
   d. in reality it is white

9a. ☐
b. ☐
c. ☐
d. ☐

10. Red, green, and blue are _____.
    a. the primary colors of light
    b. the colors of the rainbow
    c. opposite colors
    d. secondary colors

10a. ☐
b. ☐
c. ☐
d. ☐

607

1. Exerting a push or pull is known as _____.
   a. force
   b. work
   c. motion
   d. gravity

1a. ☐
b. ☐
c. ☐
d. ☐

2. The force that pulls things toward the center of the earth is _____.
   a. gravity
   b. muscular
   c. water
   d. steam

2a. ☐
b. ☐
c. ☐
d. ☐

3. The scientific definition of *work* is _____.
   a. *force used to generate power*
   b. *motion*
   c. *horsepower*
   d. *the amount of force times the distance it moves an object*

3a. ☐
b. ☐
c. ☐
d. ☐

4. The unit for measuring work is called the _____.
   a. foot-pound
   b. horsepower
   c. time
   d. effort

4a. ☐
b. ☐
c. ☐
d. ☐

5. The measurement of electrical power is called _____.
   a. watts
   b. shock
   c. light
   d. horsepower

5a. ☐
b. ☐
c. ☐
d. ☐

6. 550 foot-pounds per second is _____.
   a. 1 watt
   b. 1 kilogram-meter
   c. 1 cubic
   d. 1 horsepower

6a. ☐
b. ☐
c. ☐
d. ☐

7. The force that holds planets, stars, and other heavenly bodies in space is called _____.
   a. inertia
   b. gravity
   c. universal force
   d. cosmic force

7a. ☐
b. ☐
c. ☐
d. ☐

8. The tendency of an object to remain at rest or to continue in motion with constant speed in a straight line is called _____.
   a. inertia
   b. gravity
   c. constancy
   d. pendulum

8a. ☐
b. ☐
c. ☐
d. ☐

9. A force that opposes motion is _____.
   a. inertia
   b. gravity
   c. work
   d. friction

9a. ☐
b. ☐
c. ☐
d. ☐

10. A mechanical device used to help do work is _____.
    a. force
    b. a machine
    c. a circular
    d. motion

10a. ☐
b. ☐
c. ☐
d. ☐

608

1. The length of the earth's journey around the sun is _____.
   a. 5 years
   b. 10 years
   c. 3 months
   d. 1 year
2. The shape of the earth's orbit around the sun is _____.
   a. circular
   b. elliptical
   c. horizontal
   d. rectangular
3. The seasons are caused by the revolution of the earth around the sun and the _____.
   a. earth's tilt on its axis
   b. elevation
   c. earth's shape
   d. cloud coverage
4. Time zones are determined by the _____ of the earth's rotation.
   a. speed
   b. direction
   c. longitude
   d. eclipse
5. A solar eclipse occurs when _____.
   a. the earth passes between the sun and the moon
   b. the moon passes between the sun and the earth
   c. comets pass between the sun and the earth
   d. the sun is covered by clouds
6. A type of eclipse in which the moon is darkened is _____.
   a. an ellipse
   b. a solar eclipse
   c. a lunar eclipse
   d. an equinox
7. Five of the planets in our solar system are Mercury, Venus, Earth, Mars, and Jupiter. The other three planets are _____.
   a. Juno, Pandora, Neptune, and Popeye
   b. Zeus, Ezra, Medusa, and Pluto
   c. Satin, Uranium, Neptune, and Bluto
   d. Saturn, Uranus, and Neptune
8. The smallest planet is _____.
   a. Mercury
   b. Uranus
   c. Saturn
   d. Earth
9. Shooting stars are called _____.
   a. meteors
   b. comets
   c. asteriods
   d. planets
10. A heavenly body with a long trail of gases is called _____.
    a. a meteor
    b. a comet
    c. an asteroid
    d. a planet

1a. ☐ b. ☐ c. ☐ d. ☐
2a. ☐ b. ☐ c. ☐ d. ☐
3a. ☐ b. ☐ c. ☐ d. ☐
4a. ☐ b. ☐ c. ☐ d. ☐
5a. ☐ b. ☐ c. ☐ d. ☐
6a. ☐ b. ☐ c. ☐ d. ☐
7a. ☐ b. ☐ c. ☐ d. ☐
8a. ☐ b. ☐ c. ☐ d. ☐
9a. ☐ b. ☐ c. ☐ d. ☐
10a. ☐ b. ☐ c. ☐ d. ☐

609

1. About 99 percent of the sun is made of _____.
   a. molten lava
   b. chemical fire
   c. hydrogen and helium gases
   d. oxygen

1a. ☐
b. ☐
c. ☐
d. ☐

2. The power plant of the sun is its _____.
   a. core
   b. corona
   c. solar flares
   d. reflectors

2a. ☐
b. ☐
c. ☐
d. ☐

3. The Milky Way Galaxy consists of _____.
   a. one star
   b. our solar system only
   c. billions of stars
   d. candy bars

3a. ☐
b. ☐
c. ☐
d. ☐

4. Clouds of dust and gas found in the Milky Way are called _____.
   a. galaxies
   b. asteroids
   c. meteoroids
   d. nebulae

4a. ☐
b. ☐
c. ☐
d. ☐

5. Scientists use a star's color to calculate its _____.
   a. distance from earth
   b. temperature
   c. size
   d. spectrum

5a. ☐
b. ☐
c. ☐
d. ☐

6. The brightness of a star is called its _____.
   a. magnitude
   b. magnificence
   c. magnifier
   d. spectrum

6a. ☐
b. ☐
c. ☐
d. ☐

7. Scientists study the dark lines in a star's spectrum to identify _____.
   a. the star's name
   b. the age of the star
   c. elements in the star
   d. the star's origin

7a. ☐
b. ☐
c. ☐
d. ☐

8. An instrument used to study the spectrum of light of a star is a _____.
   a. spectroscope
   b. telescope
   c. magnifying glass
   d. microscope

8a. ☐
b. ☐
c. ☐
d. ☐

9. The constellation which contains the Big Dipper is _____.
   a. Ursa Major
   b. Ursa Minor
   c. Taurus
   d. Orion

9a. ☐
b. ☐
c. ☐
d. ☐

10. Cassiopeia is a constellation which looks like _____.
    a. a bull
    b. a hunter
    c. a herdsman
    d. a giant letter W or M

10a. ☐
b. ☐
c. ☐
d. ☐

610

1. The tubes which transport water and minerals upward in the stem are called _____.
   a. xylem
   b. phloem
   c. cuticle
   d. cortex

1a. ☐
b. ☐
c. ☐
d. ☐

2. Three functions of skin are to remove cell waste (sweating), to protect the body from germs and dirt, and to _____.
   a. hold the body together
   b. help humans get a suntan
   c. cool the body
   d. give each person a different color

2a. ☐
b. ☐
c. ☐
d. ☐

3. The part of the brain which coordinates all the muscles so that they work together is the _____.
   a. cerebrum
   b. cerebellum
   c. medulla
   d. cranium

3a. ☐
b. ☐
c. ☐
d. ☐

4. Plants seeking light is an example of _____.
   a. geotropism
   b. phototropism
   c. hydrotropism
   d. negative tropism

4a. ☐
b. ☐
c. ☐
d. ☐

5. A change in a gene which forms a new trait that can be inherited is called _____.
   a. transmissions
   b. evolution
   c. creation
   d. a mutation

5a. ☐
b. ☐
c. ☐
d. ☐

6. A substance whose molecules consist of atoms which are chemically united is _____.
   a. an element
   b. matter
   c. a molecule
   d. a compound

6a. ☐
b. ☐
c. ☐
d. ☐

7. The loudness of a sound is the _____.
   a. pitch
   b. rarefaction
   c. vibration
   d. amplitude

7a. ☐
b. ☐
c. ☐
d. ☐

8. The rate of doing work is called _____.
   a. quickness
   b. deadline
   c. power
   d. inertia

8a. ☐
b. ☐
c. ☐
d. ☐

9. The prime meridian is located at _____.
   a. 180°
   b. 90°
   c. 0°
   d. 60°

9a. ☐
b. ☐
c. ☐
d. ☐

10. The visible surface of the sun is called the _____.
    a. core
    b. corona
    c. photosphere
    d. reflector

10a. ☐
b. ☐
c. ☐
d. ☐

701

1. The standard metric unit of volume is the _____.
   a. liter
   b. cubic centimeter
   c. cubic meter
   d. milliliter

1a. ☐
b. ☐
c. ☐
d. ☐

2. The standard metric unit of mass is the _____.
   a. pound
   b. gram
   c. ton
   d. kilogram

2a. ☐
b. ☐
c. ☐
d. ☐

3. Objects are usually grouped together because they are _____.
   a. small
   b. large
   c. similar
   d. different

3a. ☐
b. ☐
c. ☐
d. ☐

4. In terms of internal structure, a cat is most like _____.
   a. a worm
   b. a jellyfish
   c. an insect
   d. a bird

4a. ☐
b. ☐
c. ☐
d. ☐

5. A scientific law is _____.
   a. a deductive statement
   b. an observation
   c. a hypothesis
   d. unbiblical

5a. ☐
b. ☐
c. ☐
d. ☐

6. Deductive reasoning begins with _____.
   a. an observation
   b. an experiment
   c. a generalization
   d. research

6a. ☐
b. ☐
c. ☐
d. ☐

7. The first step in applying the scientific method to solving a problem is _____.
   a. identifying the problem
   b. forming a hypothesis
   c. conducting an experiment
   d. drawing a conclusion

7a. ☐
b. ☐
c. ☐
d. ☐

8. A guess that must either be proved or be disproved is _____.
   a. a law
   b. an observation
   c. a conclusion
   d. a hypothesis

8a. ☐
b. ☐
c. ☐
d. ☐

9. Biological science deals with _____.
   a. rocks and minerals
   b. mathematics
   c. plants and animals
   d. money and laws

9a. ☐
b. ☐
c. ☐
d. ☐

10. The sciences that deal with customs, laws, religion, and behavior are _____.
    a. mathematics and logic
    b. the social sciences
    c. the physical sciences
    d. the biological sciences

10a. ☐
b. ☐
c. ☐
d. ☐

702

1. The metric system began in _____.
   a. Germany
   b. the United States
   c. France
   d. Great Britain

1a. ☐
b. ☐
c. ☐
d. ☐

2. The United States began a formal shift toward use of the metric system under President _____.
   a. Jackson
   b. Lincoln
   c. Wilson
   d. Ford

2a. ☐
b. ☐
c. ☐
d. ☐

3. Divisions of the metric system are based on the number _____.
   a. twelve
   b. two
   c. ten
   d. three

3a. ☐
b. ☐
c. ☐
d. ☐

4. The dimension of length has _____ basic metric units.
   a. one
   b. three
   c. two
   d. four

4a. ☐
b. ☐
c. ☐
d. ☐

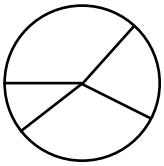
5. Mass is a measure of _____.
   a. density
   b. volume
   c. matter
   d. weight

5a. ☐
b. ☐
c. ☐
d. ☐

6. The response of an object to a gravitational force field is its _____.
   a. mass
   b. weight
   c. density
   d. volume

6a. ☐
b. ☐
c. ☐
d. ☐

7. This type of graph is a _____ graph.
   a. line
   b. circle
   c. bar
   d. picto-



7a. ☐
b. ☐
c. ☐
d. ☐

8. This type of graph is a _____ graph.
   a. line
   b. circle
   c. bar
   d. picto-

8a. ☐
b. ☐
c. ☐
d. ☐

9. A pictograph is most similar to a _____ graph.
   a. variable
   b. circle
   c. pie
   d. bar

9a. ☐
b. ☐
c. ☐
d. ☐

10. To relate parts of a quantity to the whole quantity, a _____ graph is best.
    a. line
    b. circle
    c. bar
    d. picto-

10a. ☐
b. ☐
c. ☐
d. ☐

703

1. The motions of the sun, moon, and stars give the appearance that the center of the universe is the _____.
   a. earth
   b. sun
   c. North Star
   d. moon

1a. ☐ b. ☐ c. ☐ d. ☐

2. Copernicus, Kepler, and Galileo promoted an explanation of planetary motion called the _____ theory.
   a. geocentric
   b. heliocentric
   c. concentric
   d. eccentric

2a. ☐ b. ☐ c. ☐ d. ☐

3. Five lights in the night sky that sometimes do not follow the normal paths of stars are _____.
   a. meteors
   b. planets
   c. comets
   d. satellites

3a. ☐ b. ☐ c. ☐ d. ☐

4. Something that could not happen if the sun and moon were on the same celestial sphere is _____.
   a. comets
   b. eclipses
   c. sunsets
   d. tides

4a. ☐ b. ☐ c. ☐ d. ☐

5. The astronomer who modified Aristotle's geocentric theory with epicycles was _____.
   a. Aristarchus
   b. Ptolemy
   c. Copernicus
   d. Galileo

5a. ☐ b. ☐ c. ☐ d. ☐

6. The astronomer whose observations with the unaided eye were used by other astronomers to predict the shape of orbits was _____.
   a. Kepler
   b. Brahe
   c. Newton
   d. Copernicus

6a. ☐ b. ☐ c. ☐ d. ☐

7. The time taken for a planet to revolve around the sun is known as the _____.
   a. month
   b. period of revolution
   c. orbital equation
   d. speed of the planet

7a. ☐ b. ☐ c. ☐ d. ☐

8. The sun occupies a point within the planetary orbits called the _____.
   a. center
   b. focal point
   c. equinox
   d. directrix

8a. ☐ b. ☐ c. ☐ d. ☐

9. Gravitational attraction exists _____.
   a. only between objects in our solar system
   b. only between the earth and the moon
   c. only between objects on the earth
   d. between all objects everywhere

9a. ☐ b. ☐ c. ☐ d. ☐

10. As the distance between objects increases, gravitational attraction _____.
    a. increases
    b. decreases
    c. remains constant
    d. is unaffected

10a. ☐ b. ☐ c. ☐ d. ☐

704

1. Most of the energy used on the earth comes directly or indirectly from the _____.
   a. center of the earth
   b. decay of radioactive elements in the mantle
   c. fusion reactions on the sun
   d. combustion of coal

1a. ☐ b. ☐ c. ☐ d. ☐

2. Solar energy is stored as chemical energy in the form of _____.
   a. uranium
   b. salt
   c. petroleum
   d. hydrogen

2a. ☐ b. ☐ c. ☐ d. ☐

3. The element that serves as fuel for solar energy is _____.
   a. uranium
   b. hydrogen
   c. petroleum
   d. helium

3a. ☐ b. ☐ c. ☐ d. ☐

4. The scientist who explained mathematically the conversion of mass to energy was _____.
   a. Newton
   b. Bohr
   c. Einstein
   d. Planck

4a. ☐ b. ☐ c. ☐ d. ☐

5. The word that best describes an eclipse is _____.
   a. surface
   b. shadow
   c. ring
   d. light

5a. ☐ b. ☐ c. ☐ d. ☐

6. *Umbra* refers to _____.
   a. the darkest part of the eclipse
   b. partial eclipse
   c. the brilliant ring around the sun
   d. the new moon

6a. ☐ b. ☐ c. ☐ d. ☐

7. The largest planet is _____.
   a. Mercury
   b. Jupiter
   c. Earth
   d. Mars

7a. ☐ b. ☐ c. ☐ d. ☐

8. Jupiter most closely resembles _____.
   a. the sun
   b. the moon
   c. the earth
   d. Mars

8a. ☐ b. ☐ c. ☐ d. ☐

9. The high high tides and low low tides are called _____ tides.
   a. flood
   b. ebb
   c. spring
   d. neap

9a. ☐ b. ☐ c. ☐ d. ☐

10. A seacoast town experiences _____ high tide(s) every twenty-four hours.
    a. one
    b. two
    c. four
    d. eight

10a. ☐ b. ☐ c. ☐ d. ☐

705

1. The two most abundant atmospheric gases make up _____ of the atmosphere.
   a. one-half
   b. three-quarters
   c. nine-tenths
   d. well over nine-tenths

1a. ☐
b. ☐
c. ☐
d. ☐

2. The most abundant gas is _____.
   a. oxygen
   b. carbon dioxide
   c. nitrogen
   d. hydrogen

2a. ☐
b. ☐
c. ☐
d. ☐

3. The lowest layer of the atmosphere is the _____.
   a. troposphere
   b. ozonosphere
   c. stratosphere
   d. ionosphere

3a. ☐
b. ☐
c. ☐
d. ☐

4. The part of the atmosphere in which radiation from space produces charged particles is the _____.
   a. troposphere
   b. ozonosphere
   c. stratosphere
   d. ionosphere

4a. ☐
b. ☐
c. ☐
d. ☐

5. Seawater and certain sedimentary rocks are two reservoirs in the _____ cycle.
   a. carbon
   b. nitrogen
   c. hydrogen
   d. water

5a. ☐
b. ☐
c. ☐
d. ☐

6. The cycle whose energy is provided by the sun during evaporation is the _____ cycle.
   a. carbon
   b. nitrogen
   c. oxygen
   d. water

6a. ☐
b. ☐
c. ☐
d. ☐

7. Sulfur oxide pollutants are formed by using _____ as a fuel.
   a. coal
   b. natural gas
   c. uranium
   d. geothermal steam

7a. ☐
b. ☐
c. ☐
d. ☐

8. Lead in the atmosphere interferes with the body's ability to produce _____.
   a. carbon dioxide
   b. blood
   c. oxygen
   d. calcium

8a. ☐
b. ☐
c. ☐
d. ☐

9. Our role as steward implies that we _____ our natural resources.
   a. consume
   b. sell abroad
   c. use wisely
   d. recycle

9a. ☐
b. ☐
c. ☐
d. ☐

10. A reasonable goal for an industrialized nation is _____.
    a. to reduce pollution to zero
    b. to reduce pollution by 50 percent
    c. to accept the minimum pollution necessary to maintain a desirable life style
    d. to accept the present level of pollution

10a. ☐
b. ☐
c. ☐
d. ☐

706

1. The greatest effect on weather is exerted by _____.
   a. wind
   b. temperature
   c. air pressure
   d. moisture
2. The temperature of an air mass directly affects the _____ the air mass.
   a. winds around
   b. air pressure beneath
   c. moisture within
   d. precipitation from
3. Air pressure increases when _____.
   a. the temperature of the air mass decreases
   b. the temperature rises and the humidity remains constant
   c. the temperature rises and the humidity increases
   d. the temperature rises and the humidity decreases
4. The wind pattern around a low-pressure region is called _____.
   a. a cyclone
   b. an anticyclone
   c. an aneroid
   d. a downdraft
5. The air mass that typically forms over northern Canada is _____.
   a. maritime polar
   b. maritime tropical
   c. continental polar
   d. continental tropical
6. Tall, fluffy clouds are called _____.
   a. cirrus
   b. stratus
   c. nimbo-stratus
   d. cumulus
7. The boundary between two air masses is _____.
   a. a storm
   b. an isobar
   c. a weather front
   d. a downdraft
8. A drop in temperature is usually forecasted by the arrival of _____ front.
   a. a warm
   b. a cold
   c. an occluded
   d. a stationary
9. A small, local storm that forms from rapidly rising warm air is _____.
   a. a thunderstorm
   b. a tornado
   c. a hurricane
   d. a typhoon
10. The eye of a hurricane is characterized by _____.
    a. heavy rain and winds greater than 80 kph
    b. little rain and high winds
    c. heavy rain and light winds
    d. little rain and winds under 5 kph

1a. ☐
b. ☐
c. ☐
d. ☐

2a. ☐
b. ☐
c. ☐
d. ☐

3a. ☐
b. ☐
c. ☐
d. ☐

4a. ☐
b. ☐
c. ☐
d. ☐

5a. ☐
b. ☐
c. ☐
d. ☐

6a. ☐
b. ☐
c. ☐
d. ☐

7a. ☐
b. ☐
c. ☐
d. ☐

8a. ☐
b. ☐
c. ☐
d. ☐

9a. ☐
b. ☐
c. ☐
d. ☐

10a. ☐
b. ☐
c. ☐
d. ☐

☐

707

1. The weather that characterizes an area is the _____ of that area.
   a. geography
   b. barometric pressure
   c. climate
   d. latitude

1a. ☐
b. ☐
c. ☐
d. ☐

2. A statement that might be part of a region's weather report is _____.
   a. a yearly rainfall of 50 cm
   b. a daily high of 35° C
   c. an average seasonal temperature of 25° C
   d. the Sunshine State

2a. ☐
b. ☐
c. ☐
d. ☐

3. Primary control of a region's temperature results from _____.
   a. radioactive decay
   b. solar radiation
   c. volcanic activity
   d. geothermal heat

3a. ☐
b. ☐
c. ☐
d. ☐

4. The coolest climates occur at _____.
   a. high altitude and high latitude
   b. low altitude and low latitude
   c. high altitude and low latitude
   d. low altitude and high latitude

4a. ☐
b. ☐
c. ☐
d. ☐

5. Climate that has characteristics derived from being near water is called _____.
   a. mesothermal
   b. tropical
   c. maritime
   d. polar

5a. ☐
b. ☐
c. ☐
d. ☐

6. The term *desert* is commonly a synonym for _____.
   a. polar
   b. tropical
   c. maritime
   d. arid

6a. ☐
b. ☐
c. ☐
d. ☐

7. Communities within the Arctic Circle do not regulate their lives by _____.
   a. the sun
   b. laws
   c. tradition
   d. a clock

7a. ☐
b. ☐
c. ☐
d. ☐

8. Rain forests provide adequate hunting and gathering for _____.
   a. Pygmies
   b. Bedouins
   c. Eskimos
   d. Mediterraneans

8a. ☐
b. ☐
c. ☐
d. ☐

9. The continent whose entire interior is a desert is _____.
   a. North America
   b. Australia
   c. Europe
   d. South America

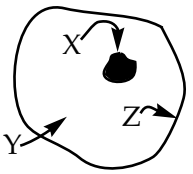
9a. ☐
b. ☐
c. ☐
d. ☐

10. Tropical rain forests make up the interior of _____.
    a. Australia
    b. North America
    c. Antarctica
    d. South America

10a. ☐
b. ☐
c. ☐
d. ☐

☐

1-3 Answer these three questions by referring to the illustration.



708

1. *X* labels the part of the cell which is the _____.
   a. membrane
   b. nucleus
   c. Golgi
   d. cytoplasm
2. *Y* labels the part of the cell which is the _____.
   a. membrane
   b. granules
   c. cytoplasm
   d. corpuscle
3. *Z* labels the part of the cell which is the _____.
   a. membrane
   b. nucleus
   c. cytoplasm
   d. corpuscle
4. Parts of the body, such as the nose, trachea, and lungs, that work together are collectively called _____.
   a. tissues
   b. organs
   c. systems
   d. organisms
5. The heart, kidney, liver, and other bodily parts that each carry out one or more jobs are individually called _____.
   a. a tissue
   b. an organ
   c. a system
   d. an organism
6. The flexible support tissue that gives shape to, among other things, the tip of the nose and the ears is _____.
   a. cartilage
   b. ossicle
   c. cilia
   d. osteum
7. Stomach and intestinal movement are controlled by _____.
   a. voluntary muscles
   b. cardiac muscles
   c. involuntary muscles
   d. striped muscles
8. The gap between nerve cells is called _____.
   a. a synapse
   b. an axon
   c. a neutron
   d. a dendrite
9. The part of the brain that controls coordination and voluntary movements is the _____.
   a. medulla
   b. cerebellum
   c. cerebrum
   d. spinal cord
10. The central nervous system is made up of the _____.
    a. cerebellum, eyes, and ears
    b. cerebellum, speech center, and eyes
    c. cerebrum, eyes, and ears
    d. cerebrum, cerebellum, and spinal cord

1a. ☐ b. ☐ c. ☐ d. ☐

2a. ☐ b. ☐ c. ☐ d. ☐

3a. ☐ b. ☐ c. ☐ d. ☐

4a. ☐ b. ☐ c. ☐ d. ☐

5a. ☐ b. ☐ c. ☐ d. ☐

6a. ☐ b. ☐ c. ☐ d. ☐

7a. ☐ b. ☐ c. ☐ d. ☐

8a. ☐ b. ☐ c. ☐ d. ☐

9a. ☐ b. ☐ c. ☐ d. ☐

10a. ☐ b. ☐ c. ☐ d. ☐

709

1. The circulatory system is made up of the _____.
   a. heart, lungs, kidneys, and liver
   b. heart, veins, capillaries, and arteries
   c. lungs, kidneys, liver, and thyroid
   d. mouth, stomach, small intestine, and large intestine

1a. ☐ b. ☐ c. ☐ d. ☐

2. Blood that arrives at the heart goes first to the _____.
   a. lungs
   b. brain
   c. abdomen
   d. kidneys

2a. ☐ b. ☐ c. ☐ d. ☐

3. White blood cells are designed to _____.
   a. transport oxygen
   b. carry nutrients
   c. fight infection
   d. prevent hemorrhages

3a. ☐ b. ☐ c. ☐ d. ☐

4. The purpose of blood platelets is to _____.
   a. stop bleeding
   b. carry oxygen
   c. prevent infection
   d. produce antibodies

4a. ☐ b. ☐ c. ☐ d. ☐

5. Digestion of protein begins in the _____.
   a. mouth
   b. stomach
   c. small intestine
   d. large intestine

5a. ☐ b. ☐ c. ☐ d. ☐

6. In the mouth digestion of _____ begins.
   a. protein
   b. starch
   c. fat
   d. sugar

6a. ☐ b. ☐ c. ☐ d. ☐

7. The function of the kidneys is similar to the function of _____.
   a. a carburetor
   b. a brake cylinder
   c. an oil filter
   d. a windshield wiper

7a. ☐ b. ☐ c. ☐ d. ☐

8. The bladder is connected directly to the _____.
   a. heart
   b. stomach
   c. large intestine
   d. kidneys

8a. ☐ b. ☐ c. ☐ d. ☐

9. The master control gland for the body is the _____ gland.
   a. pituitary
   b. pancreas
   c. thymus
   d. adrenal

9a. ☐ b. ☐ c. ☐ d. ☐

10. Physical or emotional stress produces a response in the _____ gland.
    a. pituitary
    b. pancreas
    c. adrenal
    d. thymus

10a. ☐ b. ☐ c. ☐ d. ☐

710

1. Information gained during an experiment is called _____.
   a. data — 1a. ☐
   b. conclusions — b. ☐
   c. hypothesis — c. ☐
   d. laws — d. ☐
2. The prefix *kilo-* means _____.
   a. one-thousandth — 2a. ☐
   b. one-hundredth — b. ☐
   c. one thousand — c. ☐
   d. one million — d. ☐
3. The word *geocentric* means _____.
   a. astronomical — 3a. ☐
   b. sun-centered — b. ☐
   c. solar — c. ☐
   d. earth-centered — d. ☐
4. The scientist whose name is given to the law of gravitation is _____.
   a. Kepler — 4a. ☐
   b. Aristotle — b. ☐
   c. Newton — c. ☐
   d. Copernicus — d. ☐
5. The type of reaction that generates the sun's energy is _____.
   a. fusion — 5a. ☐
   b. fission — b. ☐
   c. chemical — c. ☐
   d. oxidation — d. ☐
6. The gas comprising about 21 percent of our atmosphere is _____.
   a. oxygen — 6a. ☐
   b. carbon dioxide — b. ☐
   c. nitrogen — c. ☐
   d. hydrogen — d. ☐
7. A narrow, funnel-shaped cloud of rapidly rotating winds around a low-pressure center is _____.
   a. a thunderstorm — 7a. ☐
   b. a tornado — b. ☐
   c. a hurricane — c. ☐
   d. a typhoon — d. ☐
8. Air pressure at high elevations is less than at sea level because _____.
   a. warm air is lighter than cold air — 8a. ☐
   b. winds blow up mountain slopes — b. ☐
   c. less air overlies high elevations — c. ☐
   d. temperatures are cooler at high elevations — d. ☐
9. The outer skin layer is the _____.
   a. hairline — 9a. ☐
   b. dermis — b. ☐
   c. epidermis — c. ☐
   d. fatty layer — d. ☐
10. Metabolism and growth rate are controlled by the _____ gland.
    a. pancreas — 10a. ☐
    b. thyroid — b. ☐
    c. thymus — c. ☐
    d. adrenal — d. ☐

801

1. *Science* is best defined as _____.
   a. an orderly arrangement of knowledge — 1a. ☐
   b. an accumulation of information — b. ☐
   c. the study of physics, chemistry, and geology — c. ☐
   d. incorrect and unscriptural assumptions — d. ☐
2. A complete and correct statement is that technology _____.
   a. is the cause of the world's pollution problems — 2a. ☐
   b. draws people away from the good things in life — b. ☐
   c. is amoral; that is, neither good nor bad — c. ☐
   d. will solve the world's basic problems — d. ☐
3. Most Greek philosophers were not true scientists because they _____.
   a. could not read — 3a. ☐
   b. did not experiment — b. ☐
   c. were concerned more with art and literature than with things of nature — c. ☐
   d. were not government funded — d. ☐
4. The birth of technology occurred with the _____.
   a. Industrial Revolution — 4a. ☐
   b. Renaissance — b. ☐
   c. invention of the wheel — c. ☐
   d. atomic age — d. ☐
5. The number 93 million, in scientific notation, is _____.
   a. 93,000,000 — 5a. ☐
   b. 93 million — b. ☐
   c. 93×10^{6} — c. ☐
   d. 9.3×10^{7} — d. ☐
6. A correct scientific notation is _____.
   a. 431×10^{-3} — 6a. ☐
   b. 7×10^{8} — b. ☐
   c. 16×10^{5} — c. ☐
   d. 0.05×10^{-8} — d. ☐
7. The metric unit of mass is the _____.
   a. kilogram — 7a. ☐
   b. meter — b. ☐
   c. pound — c. ☐
   d. liter — d. ☐
8. A measure of volume is _____.
   a. meter — 8a. ☐
   b. liter — b. ☐
   c. second — c. ☐
   d. gram — d. ☐
9. A scientist is most likely to find out if his guess is correct by _____.
   a. performing experiments — 9a. ☐
   b. asking a graduate student — b. ☐
   c. thinking about the question — c. ☐
   d. using a computer — d. ☐
10. The announced or published result of interpreting the data collected in an investigation is _____.
    a. a law — 10a. ☐
    b. a theory — b. ☐
    c. a problem — c. ☐
    d. an experiment — d. ☐

☐

802

1. All matter in the universe has _____.
   a. magnetism
   b. momentum
   c. mass
   d. motion

1a. ☐
b. ☐
c. ☐
d. ☐

2. Matter on earth exists in at least one of _____ states.
   a. two
   b. three
   c. twelve
   d. twenty

2a. ☐
b. ☐
c. ☐
d. ☐

3. Generally, molecules of a solid are more _____ than are molecules of other states.
   a. spread out
   b. close together
   c. highly active
   d. free to move

3a. ☐
b. ☐
c. ☐
d. ☐

4. The gaseous state of a substance (for example, water) differs from the solid state in that the gaseous state has _____.
   a. a definite volume
   b. high speed molecules
   c. less energy
   d. a definite shape

4a. ☐
b. ☐
c. ☐
d. ☐

5. The nuclei of most atoms are made of _____.
   a. protons and electrons
   b. electrons and nucleons
   c. neutrons and protons
   d. neutrons and electrons

5a. ☐
b. ☐
c. ☐
d. ☐

6. Of the following choices the compound is _____.
   a. H_2O
   b. H_2
   c. saltwater
   d. Ne

6a. ☐
b. ☐
c. ☐
d. ☐

7. An example of a mixture is _____.
   a. hot water
   b. salt water
   c. sodium hydroxide
   d. hydrogen

7a. ☐
b. ☐
c. ☐
d. ☐

Answer Items 8 through 10 by referring to the entry for potassium.

2 8 8 1	19 K 39

8. The number of protons in an atom of potassium is _____.
   a. 2
   b. 19
   c. 20
   d. 39

8a. ☐
b. ☐
c. ☐
d. ☐

9. The number of protons in an atom is called the _____.
   a. mass number
   b. atomic mass
   c. valence
   d. atomic number

9a. ☐
b. ☐
c. ☐
d. ☐

10. The number of particles in the nucleus of a potassium atom is _____.
    a. 2
    b. 19
    c. 20
    d. 39

10a. ☐
b. ☐
c. ☐
d. ☐

803

1. Common table salt (NaCl) is composed of sodium, a highly reactive metal, and chlorine, a poisonous gas. The harmless product is a result of a _____ reaction.
   a. nuclear
   b. chemical
   c. physical
   d. phase

1a. ☐
b. ☐
c. ☐
d. ☐

2. An extremely small amount of matter is converted to energy in a _____ reaction.
   a. nuclear
   b. chemical
   c. physical
   d. phase

2a. ☐
b. ☐
c. ☐
d. ☐

3. The fuel for a fusion reaction is _____.
   a. hydrogen
   b. helium
   c. radium
   d. uranium

3a. ☐
b. ☐
c. ☐
d. ☐

4. A common fuel for fission reactions is _____.
   a. hydrogen
   b. helium
   c. lead
   d. uranium

4a. ☐
b. ☐
c. ☐
d. ☐

5. Beta radiation consists of _____ emitted from an atomic nucleus.
   a. protons
   b. neutrons
   c. electrons
   d. mesons

5a. ☐
b. ☐
c. ☐
d. ☐

6. Gamma radiation is most similar to _____.
   a. alpha radiation
   b. sound
   c. light
   d. electrons

6a. ☐
b. ☐
c. ☐
d. ☐

7. Of the following choices the acid is _____.
   a. NaOH
   b. KCl
   c. HNO_3
   d. $NaHCO_3$

7a. ☐
b. ☐
c. ☐
d. ☐

8. An identifying characteristic of an acid in solution is _____.
   a. H^+
   b. OH^-
   c. K^+
   d. $O^=$

8a. ☐
b. ☐
c. ☐
d. ☐

9. All bases contain _____.
   a. oxygen and sodium
   b. helium and potassium
   c. oxygen and hydrogen
   d. hydrogen and potassium

9a. ☐
b. ☐
c. ☐
d. ☐

10. Of the following choices the base is _____.
    a. $NaHCO_3$
    b. HNO_3
    c. NaOH
    d. KCl

10a. ☐
b. ☐
c. ☐
d. ☐

804

1. Starches and sugars are both classified as _____.
   a. proteins
   b. fats
   c. carbohydrates
   d. vitamins

1a. ☐
b. ☐
c. ☐
d. ☐

2. The nutrient class that is neither animal nor vegetable is _____.
   a. proteins
   b. fats
   c. minerals
   d. carbohydrates

2a. ☐
b. ☐
c. ☐
d. ☐

3. The nutrient that transports vitamins A, D, and E and that is a slow-energy source is _____.
   a. proteins
   b. minerals
   c. fats
   d. carbohydrates

3a. ☐
b. ☐
c. ☐
d. ☐

4. Complex organic substances necessary in small amounts for normal growth and health are _____.
   a. minerals
   b. vitamins
   c. carbohydrates
   d. fats

4a. ☐
b. ☐
c. ☐
d. ☐

5. Cheese and butter belong to the _____ food group.
   a. vegetables
   b. grains
   c. dairy
   d. protein

5a. ☐
b. ☐
c. ☐
d. ☐

6. The grains food group includes _____.
   a. macaroni, rice, and spaghetti
   b. spaghetti, peas, and peanut butter
   c. cheese, rice, and bread
   d. beans, fish, and rice

6a. ☐
b. ☐
c. ☐
d. ☐

7. Fats begin digestion in the _____.
   a. mouth
   b. stomach
   c. small intestine
   d. large intestine

7a. ☐
b. ☐
c. ☐
d. ☐

8. Proteins begin digestion in the _____.
   a. mouth
   b. stomach
   c. small intestine
   d. large intestine

8a. ☐
b. ☐
c. ☐
d. ☐

9. Exposure to sunshine is necessary for the body to produce _____.
   a. Vitamin A
   b. Vitamin B
   c. Vitamin C
   d. Vitamin D

9a. ☐
b. ☐
c. ☐
d. ☐

10. Vitamin C-deficiency symptoms, such as excessive bleeding and bruising, may be relieved by adding _____ to the diet.
    a. whole-grain cereals
    b. lean meats
    c. oranges and tomatoes
    d. milk and cheese

10a. ☐
b. ☐
c. ☐
d. ☐

805

1. *Any push or pull* is the definition of _____.
   a. force
   b. mass
   c. energy
   d. work
2. Every object in the universe is always _____.
   a. at rest
   b. doing work
   c. exerting force
   d. curving
3. An example of an object with potential energy is _____.
   a. an airplane at 35,000 feet
   b. a car traveling 80 km/hr
   c. an engine on a siding
   d. a pendulum at the bottom of its swing
4. The total energy an object possesses equals _____.
   a. kinetic energy minus potential energy
   b. potential energy minus kinetic energy
   c. one-half kinetic energy plus potential energy
   d. kinetic energy plus potential energy
5. The handle of a spoon in a soup bowl feels hot because of _____.
   a. conduction
   b. convection
   c. radiation
   d. both a and c
6. Heat is distributed throughout the water in a teakettle because of _____.
   a. conduction
   b. convection
   c. radiation
   d. none of these
7. Ten percent of the energy needed for the United States is supplied by the energy of falling water converted to _____ energy.
   a. electrical
   b. chemical
   c. atomic
   d. geothermal
8. The most frequent energy conversion is that of mechanical energy to _____.
   a. chemical energy
   b. radiant energy
   c. heat energy
   d. electrical energy
9. The disorder of creation in general is _____.
   a. increasing
   b. decreasing
   c. remaining constant
   d. increasing and decreasing
10. The Second Law of Thermodynamics states that the amount of available energy in the universe is _____.
    a. decreasing
    b. increasing
    c. constant
    d. radiant

1a. ☐
b. ☐
c. ☐
d. ☐
2a. ☐
b. ☐
c. ☐
d. ☐
3a. ☐
b. ☐
c. ☐
d. ☐
4a. ☐
b. ☐
c. ☐
d. ☐
5a. ☐
b. ☐
c. ☐
d. ☐
6a. ☐
b. ☐
c. ☐
d. ☐
7a. ☐
b. ☐
c. ☐
d. ☐
8a. ☐
b. ☐
c. ☐
d. ☐
9a. ☐
b. ☐
c. ☐
d. ☐
10a. ☐
b. ☐
c. ☐
d. ☐

806

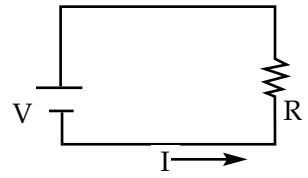
1. A magnet has _____ pole(s).
   a. one
   b. two
   c. three
   d. four

2. A substance commonly used to show a magnet's lines of force is _____.
   a. sawdust
   b. iron filings
   c. water
   d. salt

3. Electrical charges are different from magnetic poles in that _____.
   a. unlikes attract
   b. likes repel
   c. charged objects attract all uncharged objects
   d. magnetic poles attract all nonmagnetic objects

4. The statement that is *not* a law of electrostatics is _____.
   a. objects with unlike charges attract each other
   b. objects with like charges repel each other
   c. charged objects repel neutral objects
   d. charged objects attract neutral objects

5. An electric circuit that has only one path is a _____ circuit.
   a. complex
   b. series
   c. perpendicular
   d. parallel



6. If in Item 5 *V* equals 6 volts and *R* equals 2 ohms, the current, *I*, is _____ amperes.
   a. 4
   b. 12
   c. 3
   d. 8

7. The first battery of silver and zinc was constructed by _____.
   a. Fred E. Eveready
   b. Al Volta
   c. Ray O'Vac
   d. Thomas Edison

8. The first working light bulb was developed in the laboratory of _____.
   a. Franklin
   b. Coulomb
   c. Edison
   d. Morse

9. The most abundant fuel in the United States is _____.
   a. petroleum
   b. coal
   c. natural gas
   d. uranium

10. Solar power does not produce a high percentage of today's electricity needs because _____.
    a. the sun's energy that reaches the earth is insufficient
    b. no means exist to conduct sunlight to cities
    c. the technology is still too expensive
    d. the Federal government has imposed a moratorium

1a. ☐ b. ☐ c. ☐ d. ☐
2a. ☐ b. ☐ c. ☐ d. ☐
3a. ☐ b. ☐ c. ☐ d. ☐
4a. ☐ b. ☐ c. ☐ d. ☐
5a. ☐ b. ☐ c. ☐ d. ☐
6a. ☐ b. ☐ c. ☐ d. ☐
7a. ☐ b. ☐ c. ☐ d. ☐
8a. ☐ b. ☐ c. ☐ d. ☐
9a. ☐ b. ☐ c. ☐ d. ☐
10a. ☐ b. ☐ c. ☐ d. ☐

807

1. Surveyors and mapmakers use _____ to represent distances that cannot be drawn directly.
   a. arithmetic
   b. geometry
   c. calculus
   d. statistics

1a. ☐
b. ☐
c. ☐
d. ☐

2. Indirect measurement is used _____.
   a. along highways between cities
   b. in building houses
   c. in measuring distances to planets
   d. in designing automobiles

2a. ☐
b. ☐
c. ☐
d. ☐

3. A symbol commonly used to represent a force is _____.
   a. x
   b. •
   c. →
   d. 0

3a. ☐
b. ☐
c. ☐
d. ☐

4. The result of a force to the north and a force to the east is a force to the _____.
   a. northeast
   b. southeast
   c. southwest
   d. northwest

4a. ☐
b. ☐
c. ☐
d. ☐

5. An object that has no force acting on it is likely to _____.
   a. move in a straight line
   b. come to a stop
   c. move in a circle
   d. fall to the ground

5a. ☐
b. ☐
c. ☐
d. ☐

6. The result of a single force acting on an object is _____.
   a. cancelled by the object's weight
   b. acceleration
   c. no movement
   d. rotation

6a. ☐
b. ☐
c. ☐
d. ☐

7. The rate of doing work is _____.
   a. power
   b. energy
   c. force
   d. mass

7a. ☐
b. ☐
c. ☐
d. ☐

8. If work is "bought," _____ must be "spent."
   a. power
   b. joules
   c. energy
   d. mass

8a. ☐
b. ☐
c. ☐
d. ☐

9. The work done in lifting a forty-pound crate three feet is _____ foot-pounds.
   a. forty-three
   b. thirteen
   c. one hundred twenty
   d. thirty-seven

9a. ☐
b. ☐
c. ☐
d. ☐

10. If twenty-four joules of energy are spent in four seconds, the rate of output is _____ watts.
    a. six
    b. ninety-six
    c. twenty
    d. twenty-eight

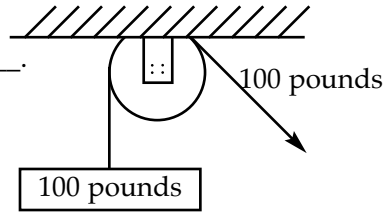
10a. ☐
b. ☐
c. ☐
d. ☐

808

1. The friction that brings a boat to a stop after the motor has been cut is _____ friction.
   a. rolling
   b. sliding
   c. atomic
   d. fluid
2. Dragging a flatbed across the ground produces _____ friction.
   a. sliding
   b. rolling
   c. atomic
   d. fluid
3. To lessen resistance of a boat moving through water, engineers often adjust the _____.
   a. grease on the bearings
   b. number of sails
   c. size of the engine
   d. shape of the hull
4. An application of the inclined plane is the _____.
   a. wedge
   b. wheel and axle
   c. lever
   d. gear

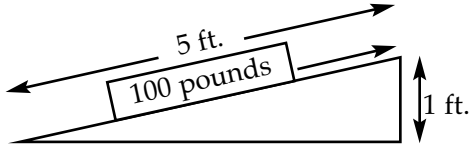
Answer Items 5 through 7 from the illustration.

5. The ideal mechanical advantage of the single fixed pulley is _____.
   a. 0
   b. 1
   c. 100
   d. 200
6. The actual mechanical advantage of the pulley is _____.
   a. 0
   b. 1
   c. 100
   d. 200
7. The efficiency of the pulley is _____ percent.
   a. 0
   b. 1
   c. 100
   d. 200



Answer Items 8 through 10 from the illustration.

8. The work input on the inclined plane is _____ foot-pounds.
   a. 100
   b. 25
   c. 125
   d. 2,500
9. The work output is _____ foot-pounds.
   a. 100
   b. 25
   c. 125
   d. 2,500
10. The efficiency of the inclined plane is _____ percent.
    a. 80
    b. 100
    c. 50
    d. 25



809

1. About five people could be fed by one United States farmer in 1910, and by 1970 more than _____ people could be fed.
   a. 40
   b. 80
   c. 120
   d. 160

1a. ☐ b. ☐ c. ☐ d. ☐

2. The forerunner of the wheat grown today for bread and cereal was most like _____.
   a. wild grass
   b. bulrushes
   c. corn cobs
   d. green beans

2a. ☐ b. ☐ c. ☐ d. ☐

3. The result of crossing two different strains of plants or animals is called a _____.
   a. thoroughbred
   b. hybrid
   c. halfbreed
   d. crossbreed

3a. ☐ b. ☐ c. ☐ d. ☐

4. A desired trait that has resulted from selective breeding of corn is _____.
   a. taller plants
   b. more green leaves
   c. larger ears
   d. more silk

4a. ☐ b. ☐ c. ☐ d. ☐

5. Decomposers in the soil _____.
   a. produce compounds poisonous to plants
   b. return dead material to simpler forms
   c. have little significant value
   d. live in leaf nodules

5a. ☐ b. ☐ c. ☐ d. ☐

6. A common practice that reintroduces nutrients into the soil is _____.
   a. one-crop agriculture
   b. terrace farming
   c. contour plowing
   d. crop rotation

6a. ☐ b. ☐ c. ☐ d. ☐

7. The energy-input part of the water cycle is _____.
   a. evaporation
   b. precipitation
   c. run-off
   d. percolation

7a. ☐ b. ☐ c. ☐ d. ☐

8. The rate of evaporation depends on the temperature of the air and water, the wind, and _____.
   a. the amount of moisture already in the air
   b. the angle of the sun
   c. the amount of water in the ocean
   d. the presence of trees and shrubs

8a. ☐ b. ☐ c. ☐ d. ☐

9. The term *ecology* comes from a Greek word that means _____.
   a. pollution
   b. home
   c. recycling
   d. gum wrapper

9a. ☐ b. ☐ c. ☐ d. ☐

10. The total amount of living material in an area is called _____.
    a. biomass
    b. protoplasm
    c. food pyramid
    d. omnivore

10a. ☐ b. ☐ c. ☐ d. ☐

810

1. A complete and correct definition of *technology* is the _____.
   a. application of science
   b. source of pollution
   c. opposite of simplicity
   d. basis of war

1a. ☐
b. ☐
c. ☐
d. ☐

2. Science as an orderly system of thought began with the philosopher _____.
   a. Copernicus
   b. Newton
   c. Aristotle
   d. Democritus

2a. ☐
b. ☐
c. ☐
d. ☐

3. Substances that have only one kind of atom are called _____.
   a. matter
   b. elements
   c. molecules
   d. atoms

3a. ☐
b. ☐
c. ☐
d. ☐

4. An example of a physical change (only) is _____.
   a. metal rusting
   b. an acid dissolving limestone
   c. water evaporating
   d. wood burning

4a. ☐
b. ☐
c. ☐
d. ☐

5. Kinetic energy depends upon _____.
   a. matter and motion
   b. matter and force
   c. height and force
   d. matter and height

5a. ☐
b. ☐
c. ☐
d. ☐

6. A measure of disorder is called _____.
   a. energy
   b. entropy
   c. power
   d. wattage

6a. ☐
b. ☐
c. ☐
d. ☐

7. The formula for work is _____.
   a. $F = ma$
   b. $F = G\frac{mm}{d^2}$
   c. $I = Prt$
   d. $W = Fd$

7a. ☐
b. ☐
c. ☐
d. ☐

8. To reduce friction the powdered lubricant _____ is used.
   a. silicone
   b. grease
   c. graphite
   d. grabtite

8a. ☐
b. ☐
c. ☐
d. ☐

9. The simple machine that has a fulcrum is the _____.
   a. wedge
   b. wheel and axle
   c. lever
   d. gear

9a. ☐
b. ☐
c. ☐
d. ☐

10. Bacteria in leguminous plants produce _____ compounds.
    a. oxygen
    b. carbon
    c. hydrogen
    d. nitrogen

10a. ☐
b. ☐
c. ☐
d. ☐

LIFEPAC®

SCIENCE

Diagnostic Test Answer Keys

200-800

201	**202**	**203**	**204**	**205**
1a. ☐	1a. ☐	1a. ■	1a. ☐	1a. ■
b. ☐	b. ■	b. ☐	b. ■	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
2a. ■	2a. ☐	2a. ☐	2a. ☐	2a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ■	c. ■
3a. ☐	3a. ☐	3a. ☐	3a. ■	3a. ■
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ■	c. ☐	c. ☐
4a. ☐	4a. ■	4a. ☐	4a. ☐	4a. ☐
b. ■	b. ☐	b. ■	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
5a. ■	5a. ☐	5a. ☐	5a. ☐	5a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ■	c. ■
6a. ☐	6a. ☐	6a. ■	6a. ■	6a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ■
7a. ☐	7a. ☐	7a. ☐	7a. ☐	7a. ■
b. ☐	b. ■	b. ☐	b. ■	b. ☐
c. ■	c. ☐	c. ■	c. ☐	c. ☐
8a. ☐	8a. ■	8a. ☐	8a. ☐	8a. ☐
b. ■	b. ☐	b. ■	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
9a. ■	9a. ☐	9a. ■	9a. ☐	9a. ☐
b. ☐	b. ■	b. ☐	b. ■	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
10a. ☐	10a. ☐	10a. ☐	10a. ■	10a. ☐
b. ■	b. ☐	b. ■	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ■

206	**207**	**208**	**209**	**210**
1a. ■	1a. □	1a. ■	1a. ■	1a. □
b. □	b. □	b. □	b. □	b. ■
c. □	c. ■	c. □	c. □	c. □
2a. □	2a. □	2a. □	2a. □	2a. □
b. □	b. □	b. ■	b. □	b. □
c. ■	c. ■	c. □	c. ■	c. ■
3a. ■	3a. □	3a. □	3a. □	3a. ■
b. □	b. ■	b. ■	b. ■	b. □
c. □	c. □	c. □	c. □	c. □
4a. ■	4a. ■	4a. ■	4a. □	4a. □
b. □	b. □	b. □	b. □	b. ■
c. □	c. □	c. □	c. ■	c. □
5a. □	5a. □	5a. □	5a. □	5a. ■
b. □	b. □	b. ■	b. ■	b. □
c. ■	c. ■	c. □	c. □	c. □
6a. □	6a. ■	6a. □	6a. ■	6a. □
b. ■	b. □	b. □	b. □	b. ■
c. □	c. □	c. ■	c. □	c. □
7a. □	7a. □	7a. ■	7a. □	7a. □
b. □	b. ■	b. □	b. ■	b. □
c. ■	c. □	c. □	c. □	c. ■
8a. ■	8a. □	8a. □	8a. □	8a. □
b. □	b. □	b. ■	b. ■	b. ■
c. □	c. ■	c. □	c. □	c. □
9a. □	9a. □	9a. □	9a. ■	9a. ■
b. ■	b. □	b. □	b. □	b. □
c. □	c. ■	c. ■	c. □	c. □
10a. □	10a. ■	10a. □	10a. □	10a. □
b. ■	b. □	b. ■	b. □	b. □
c. □	c. □	c. □	c. ■	c. ■

301	302	303	304	305
1a. ☐	1a. ☐	1a. ■	1a. ☐	1a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ■	d. ☐	d. ■	d. ☐
2a. ☐	2a. ■	2a. ☐	2a. ■	2a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ■
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
3a. ☐	3a. ☐	3a. ☐	3a. ☐	3a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ■
d. ■	d. ☐	d. ☐	d. ■	d. ☐
4a. ■	4a. ☐	4a. ☐	4a. ■	4a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ■	d. ☐	d. ■
5a. ☐	5a. ☐	5a. ■	5a. ☐	5a. ■
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
6a. ☐	6a. ☐	6a. ☐	6a. ☐	6a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ■	c. ☐	c. ■	c. ■	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
7a. ☐	7a. ☐	7a. ☐	7a. ☐	7a. ☐
b. ■	b. ☐	b. ■	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ■	d. ☐
8a. ■	8a. ☐	8a. ☐	8a. ■	8a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ■	d. ☐	d. ☐
9a. ☐	9a. ■	9a. ☐	9a. ☐	9a. ■
b. ☐	b. ☐	b. ■	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ■	d. ☐
10a. ☐	10a. ■	10a. ☐	10a. ■	10a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐

306	**307**	**308**	**309**	**310**
1a. ☐	1a. ■	1a. ☐	1a. ■	1a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ■	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
2a. ■	2a. ☐	2a. ☐	2a. ☐	2a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ■
c. ☐	c. ■	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ■	d. ☐
3a. ☐	3a. ☐	3a. ☐	3a. ☐	3a. ☐
b. ■	b. ■	b. ■	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
4a. ☐	4a. ■	4a. ☐	4a. ■	4a. ■
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
5a. ☐	5a. ☐	5a. ☐	5a. ☐	5a. ☐
b. ☐	b. ■	b. ■	b. ■	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ■	d. ☐	d. ☐	d. ☐	d. ■
6a. ☐	6a. ☐	6a. ■	6a. ☐	6a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ■	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
7a. ☐	7a. ☐	7a. ☐	7a. ☐	7a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ■	d. ■	d. ■	d. ☐
8a. ☐	8a. ☐	8a. ☐	8a. ☐	8a. ■
b. ■	b. ■	b. ■	b. ■	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
9a. ☐	9a. ■	9a. ☐	9a. ☐	9a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ■	d. ☐	d. ■
10a. ☐	10a. ☐	10a. ☐	10a. ■	10a. ☐
b. ■	b. ■	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐

401	**402**	**403**	**404**	**405**
1a. ☐	1a. ☐	1a. ☐	1a. ■	1a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ■	c. ■	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
2a. ☐	2a. ☐	2a. ☐	2a. ☐	2a. ☐
b. ☐	b. ■	b. ■	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ■
3a. ■	3a. ■	3a. ■	3a. ☐	3a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ■	d. ☐
4a. ☐	4a. ☐	4a. ☐	4a. ☐	4a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ■	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ■
5a. ☐	5a. ☐	5a. ☐	5a. ☐	5a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ■	d. ☐	d. ■	d. ☐
6a. ☐	6a. ☐	6a. ■	6a. ■	6a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ■
7a. ■	7a. ■	7a. ☐	7a. ☐	7a. ☐
b. ☐	b. ☐	b. ☐	b. ■	b. ■
c. ☐	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
8a. ☐	8a. ☐	8a. ■	8a. ☐	8a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ■	d. ■	d. ☐	d. ■	d. ☐
9a. ☐	9a. ■	9a. ■	9a. ☐	9a. ☐
b. ■	b. ☐	b. ☐	b. ■	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
10a. ■	10a. ☐	10a. ☐	10a. ☐	10a. ☐
b. ☐	b. ■	b. ■	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ■	d. ■

406	**407**	**408**	**409**	**410**
1a. ☐	1a. ☐	1a. ☐	1a. ☐	1a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ■	c. ■	c. ■	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
2a. ☐	2a. ☐	2a. ☐	2a. ■	2a. ☐
b. ■	b. ☐	b. ■	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
3a. ☐	3a. ■	3a. ☐	3a. ☐	3a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ■	c. ■	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
4a. ☐	4a. ☐	4a. ☐	4a. ☐	4a. ☐
b. ■	b. ☐	b. ■	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
5a. ☐	5a. ☐	5a. ☐	5a. ☐	5a. ☐
b. ☐	b. ☐	b. ■	b. ■	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ■
d. ■	d. ☐	d. ☐	d. ☐	d. ☐
6a. ☐	6a. ☐	6a. ■	6a. ☐	6a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ■	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
7a. ☐	7a. ☐	7a. ☐	7a. ☐	7a. ☐
b. ☐	b. ■	b. ☐	b. ■	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ■	d. ☐	d. ■	d. ☐	d. ☐
8a. ☐	8a. ☐	8a. ☐	8a. ■	8a. ■
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
9a. ☐	9a. ☐	9a. ☐	9a. ☐	9a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ■
c. ☐	c. ■	c. ☐	c. ☐	c. ☐
d. ■	d. ☐	d. ☐	d. ■	d. ☐
10a. ☐	10a. ☐	10a. ☐	10a. ■	10a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ■

501	**502**	**503**	**504**	**505**
1a. ☐	1a. ☐	1a. ☐	1a. ☐	1a. ☐
b. ☐	b. ■	b. ☐	b. ■	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ■	d. ☐	d. ☐
2a. ■	2a. ■	2a. ☐	2a. ☐	2a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
3a. ☐	3a. ☐	3a. ☐	3a. ■	3a. ■
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ■	c. ■	c. ☐	c. ☐
d. ■	d. ☐	d. ☐	d. ☐	d. ☐
4a. ☐	4a. ■	4a. ■	4a. ☐	4a. ☐
b. ■	b. ☐	b. ☐	b. ■	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
5a. ☐	5a. ☐	5a. ☐	5a. ☐	5a. ■
b. ☐	b. ☐	b. ■	b. ■	b. ☐
c. ■	c. ■	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
6a. ☐	6a. ☐	6a. ☐	6a. ☐	6a. ■
b. ■	b. ☐	b. ☐	b. ■	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
7a. ☐	7a. ■	7a. ■	7a. ☐	7a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ■	d. ☐
8a. ■	8a. ■	8a. ☐	8a. ■	8a. ■
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
9a. ☐	9a. ☐	9a. ☐	9a. ☐	9a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ☐	c. ■	c. ☐	c. ■	c. ☐
d. ■	d. ☐	d. ■	d. ☐	d. ☐
10a. ☐	10a. ☐	10a. ■	10a. ■	10a. ☐
b. ■	b. ■	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐

506	507	508	509	510
1a. ☐	1a. ☐	1a. ■	1a. ☐	1a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ■	c. ■	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
2a. ☐	2a. ■	2a. ☐	2a. ☐	2a. ☐
b. ■	b. ☐	b. ■	b. ■	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
3a. ☐	3a. ■	3a. ☐	3a. ■	3a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ■
d. ■	d. ☐	d. ☐	d. ☐	d. ☐
4a. ■	4a. ☐	4a. ☐	4a. ☐	4a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ■	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
5a. ☐	5a. ■	5a. ■	5a. ■	5a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
6a. ☐	6a. ☐	6a. ☐	6a. ☐	6a. ☐
b. ■	b. ■	b. ■	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
7a. ☐	7a. ■	7a. ■	7a. ☐	7a. ■
b. ■	b. ☐	b. ☐	b. ■	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
8a. ■	8a. ☐	8a. ☐	8a. ■	8a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ■	d. ☐	d. ☐
9a. ■	9a. ■	9a. ☐	9a. ■	9a. ■
b. ☐	b. ☐	b. ■	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
10a. ■	10a. ☐	10a. ☐	10a. ☐	10a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ■	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐

601	**602**	**603**	**604**	**605**
1a. ■	1a. □	1a. ■	1a. ■	1a. ■
b. □	b. □	b. □	b. □	b. □
c. □	c. ■	c. □	c. □	c. □
d. □	d. □	d. □	d. □	d. □
2a. □	2a. ■	2a. □	2a. □	2a. □
b. ■	b. □	b. □	b. □	b. □
c. □	c. □	c. ■	c. ■	c. □
d. □	d. □	d. □	d. □	d. ■
3a. □	3a. ■	3a. □	3a. □	3a. □
b. ■	b. □	b. ■	b. □	b. □
c. □	c. □	c. □	c. ■	c. ■
d. □	d. □	d. □	d. □	d. □
4a. ■	4a. ■	4a. □	4a. □	4a. □
b. □	b. □	b. □	b. ■	b. ■
c. □	c. □	c. ■	c. □	c. □
d. □	d. □	d. □	d. □	d. □
5a. □	5a. ■	5a. □	5a. □	5a. ■
b. ■	b. □	b. □	b. ■	b. □
c. □	c. □	c. ■	c. □	c. □
d. □	d. □	d. □	d. □	d. □
6a. ■	6a. □	6a. ■	6a. ■	6a. □
b. □	b. □	b. □	b. □	b. □
c. □	c. □	c. □	c. □	c. ■
d. □	d. ■	d. □	d. □	d. □
7a. □	7a. □	7a. □	7a. ■	7a. □
b. □	b. ■	b. □	b. □	b. ■
c. ■	c. □	c. □	c. □	c. □
d. □	d. □	d. ■	d. □	d. □
8a. ■	8a. □	8a. ■	8a. □	8a. □
b. □	b. □	b. □	b. □	b. ■
c. □	c. ■	c. □	c. ■	c. □
d. □	d. □	d. □	d. □	d. □
9a. □	9a. □	9a. ■	9a. □	9a. □
b. ■	b. □	b. □	b. ■	b. ■
c. □	c. □	c. □	c. □	c. □
d. □	d. ■	d. □	d. □	d. □
10a. ■	10a. ■	10a. □	10a. □	10a. ■
b. □	b. □	b. □	b. □	b. □
c. □	c. □	c. ■	c. ■	c. □
d. □	d. □	d. □	d. □	d. □

606	**607**	**608**	**609**	**610**
1a. ☐	1a. ■	1a. ☐	1a. ☐	1a. ■
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ■	d. ☐	d. ☐
2a. ■	2a. ■	2a. ☐	2a. ■	2a. ☐
b. ☐	b. ☐	b. ■	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
3a. ☐	3a. ☐	3a. ■	3a. ☐	3a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
4a. ☐	4a. ■	4a. ■	4a. ☐	4a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ■	d. ☐	d. ☐	d. ■	d. ☐
5a. ☐	5a. ■	5a. ☐	5a. ☐	5a. ☐
b. ☐	b. ☐	b. ■	b. ■	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ■
6a. ☐	6a. ☐	6a. ☐	6a. ■	6a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ■	d. ☐	d. ☐	d. ■
7a. ☐	7a. ☐	7a. ☐	7a. ☐	7a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ■	d. ☐	d. ■
8a. ☐	8a. ■	8a. ■	8a. ■	8a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
9a. ☐	9a. ☐	9a. ■	9a. ■	9a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ■	d. ☐	d. ☐	d. ☐
10a. ■	10a. ☐	10a. ☐	10a. ☐	10a. ☐
b. ☐	b. ■	b. ■	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ■	d. ☐

701	702	703	704	705
1a. ■	1a. □	1a. ■	1a. □	1a. □
b. □	b. □	b. □	b. □	b. □
c. □	c. ■	c. □	c. ■	c. □
d. □	d. □	d. □	d. □	d. ■
2a. □	2a. □	2a. □	2a. □	2a. □
b. □	b. □	b. ■	b. □	b. □
c. □	c. □	c. □	c. ■	c. ■
d. ■	d. ■	d. □	d. □	d. □
3a. □	3a. □	3a. □	3a. □	3a. ■
b. □	b. □	b. ■	b. ■	b. □
c. ■	c. ■	c. □	c. □	c. □
d. □	d. □	d. □	d. □	d. □
4a. □	4a. ■	4a. □	4a. □	4a. □
b. □	b. □	b. ■	b. □	b. □
c. □	c. □	c. □	c. ■	c. □
d. ■	d. □	d. □	d. □	d. ■
5a. ■	5a. □	5a. □	5a. □	5a. ■
b. □	b. □	b. ■	b. ■	b. □
c. □	c. ■	c. □	c. □	c. □
d. □	d. □	d. □	d. □	d. □
6a. □	6a. □	6a. □	6a. ■	6a. □
b. □	b. ■	b. ■	b. □	b. □
c. ■	c. □	c. □	c. □	c. □
d. □	d. □	d. □	d. □	d. ■
7a. ■	7a. □	7a. □	7a. □	7a. ■
b. □	b. ■	b. ■	b. ■	b. □
c. □	c. □	c. □	c. □	c. □
d. □	d. □	d. □	d. □	d. □
8a. □	8a. ■	8a. □	8a. ■	8a. □
b. □	b. □	b. ■	b. □	b. ■
c. □	c. □	c. □	c. □	c. □
d. ■	d. □	d. □	d. □	d. □
9a. □	9a. □	9a. □	9a. □	9a. □
b. □	b. □	b. □	b. □	b. □
c. ■	c. □	c. □	c. ■	c. ■
d. □	d. ■	d. ■	d. □	d. □
10a. □	10a. □	10a. □	10a. □	10a. □
b. ■	b. ■	b. □	b. ■	b. □
c. □	c. □	c. □	c. □	c. ■
d. □	d. □	d. ■	d. □	d. □

706	707	708	709	710
1a. ☐	1a. ☐	1a. ☐	1a. ☐	1a. ■
b. ■	b. ☐	b. ■	b. ■	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
2a. ■	2a. ☐	2a. ☐	2a. ■	2a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
3a. ■	3a. ☐	3a. ■	3a. ☐	3a. ☐
b. ☐	b. ■	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ■
4a. ■	4a. ■	4a. ☐	4a. ■	4a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
5a. ☐	5a. ☐	5a. ☐	5a. ☐	5a. ■
b. ☐	b. ☐	b. ■	b. ■	b. ☐
c. ■	c. ■	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
6a. ☐	6a. ☐	6a. ■	6a. ☐	6a. ■
b. ☐	b. ☐	b. ☐	b. ■	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ■	d. ■	d. ☐	d. ☐	d. ☐
7a. ☐	7a. ■	7a. ☐	7a. ☐	7a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ■	c. ☐	c. ■	c. ■	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
8a. ☐	8a. ■	8a. ■	8a. ☐	8a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ■	d. ☐
9a. ■	9a. ☐	9a. ☐	9a. ■	9a. ☐
b. ☐	b. ■	b. ■	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
10a. ☐	10a. ☐	10a. ☐	10a. ☐	10a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ■
c. ☐	c. ☐	c. ☐	c. ■	c. ☐
d. ■	d. ■	d. ■	d. ☐	d. ☐

801	802	803	804	805
1a. ■	1a. □	1a. □	1a. □	1a. ■
b. □	b. □	b. ■	b. □	b. □
c. □	c. ■	c. □	c. ■	c. □
d. □	d. □	d. □	d. □	d. □
2a. □	2a. □	2a. ■	2a. □	2a. □
b. □	b. ■	b. □	b. □	b. □
c. ■	c. □	c. □	c. ■	c. ■
d. □	d. □	d. □	d. □	d. □
3a. □	3a. □	3a. ■	3a. □	3a. ■
b. ■	b. ■	b. □	b. □	b. □
c. □	c. □	c. □	c. ■	c. □
d. □	d. □	d. □	d. □	d. □
4a. □	4a. □	4a. □	4a. □	4a. □
b. □	b. ■	b. □	b. ■	b. □
c. ■	c. □	c. □	c. □	c. □
d. □	d. □	d. ■	d. □	d. ■
5a. □	5a. □	5a. □	5a. □	5a. ■
b. □	b. □	b. □	b. □	b. □
c. □	c. ■	c. ■	c. ■	c. □
d. ■	d. □	d. □	d. □	d. □
6a. □	6a. ■	6a. □	6a. ■	6a. □
b. ■	b. □	b. □	b. □	b. ■
c. □	c. □	c. ■	c. □	c. □
d. □	d. □	d. □	d. □	d. □
7a. ■	7a. □	7a. □	7a. □	7a. ■
b. □	b. ■	b. □	b. □	b. □
c. □	c. □	c. ■	c. ■	c. □
d. □	d. □	d. □	d. □	d. □
8a. □	8a. □	8a. ■	8a. □	8a. □
b. ■	b. ■	b. □	b. ■	b. □
c. □	c. □	c. □	c. □	c. ■
d. □	d. □	d. □	d. □	d. □
9a. ■	9a. □	9a. □	9a. □	9a. ■
b. □	b. □	b. □	b. □	b. □
c. □	c. □	c. ■	c. □	c. □
d. □	d. ■	d. □	d. ■	d. □
10a. □	10a. □	10a. □	10a. □	10a. ■
b. ■	b. □	b. □	b. □	b. □
c. □	c. □	c. ■	c. ■	c. □
d. □	d. ■	d. □	d. □	d. □

806	**807**	**808**	**809**	**810**
1a. ☐	1a. ☐	1a. ☐	1a. ☐	1a. ■
b. ■	b. ■	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ■	d. ■	d. ☐
2a. ☐	2a. ☐	2a. ■	2a. ■	2a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
3a. ☐	3a. ☐	3a. ☐	3a. ☐	3a. ☐
b. ☐	b. ☐	b. ☐	b. ■	b. ■
c. ■	c. ■	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ■	d. ☐	d. ☐
4a. ☐	4a. ■	4a. ■	4a. ☐	4a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ■	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
5a. ☐	5a. ■	5a. ☐	5a. ☐	5a. ■
b. ■	b. ☐	b. ■	b. ■	b. ☐
c. ☐	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
6a. ☐	6a. ☐	6a. ☐	6a. ☐	6a. ☐
b. ☐	b. ■	b. ■	b. ☐	b. ■
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ■	d. ☐
7a. ☐	7a. ■	7a. ☐	7a. ■	7a. ☐
b. ■	b. ☐	b. ☐	b. ☐	b. ☐
c. ☐	c. ☐	c. ■	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ■
8a. ☐	8a. ☐	8a. ☐	8a. ■	8a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ■	c. ■	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
9a. ☐	9a. ☐	9a. ■	9a. ☐	9a. ☐
b. ■	b. ☐	b. ☐	b. ■	b. ☐
c. ☐	c. ■	c. ☐	c. ☐	c. ■
d. ☐	d. ☐	d. ☐	d. ☐	d. ☐
10a. ☐	10a. ■	10a. ■	10a. ■	10a. ☐
b. ☐	b. ☐	b. ☐	b. ☐	b. ☐
c. ■	c. ☐	c. ☐	c. ☐	c. ☐
d. ☐	d. ☐	d. ☐	d. ☐	d. ■

Science 200-800 Placement Worksheet

____________________ Student Name	____________________ Age
____________________ Date	____________________ Grade Last Completed

	200	300	400	500	600	700	800
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
	____	____	____	____	____	____	____
TOTAL SCORE	____	____	____	____	____	____	____

GRADE LEVEL PLACEMENT: A student can be placed academically using the rule that he/she has successfully passed the test for any given level if he/she achieves a **Total Score of 70 points or more**.

This student places at grade level ____________________.

LEARNING GAPS: Learning gaps can be easily identified with the placement test. If a student receives **points of 6 or less** on any individual test, he/she has not shown mastery of the skills in that particular LIFEPAC. If desired, these LIFEPACs may be ordered and completed before the student begins his assigned grade level curriculum.

Learning gap LIFEPACs for this student are ________ ________ ________ ________
________ ________ ________ ________

It is not unusual for a student to place at more than one level in various subjects when beginning the LIFEPAC curriculum. For example, a student may be placed at 5th level in Bible, mathematics, science and social studies but 4th level in language arts. The majority of school time should be concentrated on the areas of lower achievement with the ultimate goal of equal skill mastery in all subjects at the same grade level.

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