

Quiz 1-A

Name _____

A. Mark the correct answers.

1. Mark three causes of earthquakes.

- ☒ when molten rock moves under a volcano
- ☒ the buildup and release of energy when two surface plates move or shift against each other
- ☐ when the lithosphere becomes too cold
- ☒ when large amounts of earth are removed or added
- ☐ after a tsunami erupts from pressure under the crust

2. Mark three types of faults.

- ☐ irregular
- ☒ reverse
- ☒ normal
- ☐ forward
- ☒ strike-slip

B. Write the letter of the correct answer.

 D 3. the idea that the earth's crust is made up of moving plates

 A 4. breaks in the earth's surface along which rocks can move

 B 5. beginning point of an earthquake

 C 6. vibrations of energy that flow out from the beginning point of an earthquake

 E 7. the point on the surface of the earth directly above the focus

 H 8. a machine that detects, times, and measures the movements of the earth

 F 9. the strength of the seismic waves of an earthquake

 G 10. measures the magnitude of an earthquake's seismic waves and assigns it a number

A. faults
B. focus
C. seismic waves
D. theory of plate tectonics

E. epicenter
F. magnitude
G. Richter scale
H. seismograph

Quiz 1-B

Name _____

A. Write the correct term.

- | | |
|-------------------------|---|
| <u>volcano</u> | 1. forms where hot magma rises through dense rocks until it breaks through a crack in the earth's surface |
| <u>lava</u> | 2. hot molten rock that breaks through the surface of the earth |
| <u>Ring of Fire</u> | 3. active volcanoes around the edges of the Pacific Ocean |
| <u>tephra</u> | 4. a mixture of cinders, ash, and rock emitted by a volcano |
| <u>vog</u> | 5. volcanic gases released into the air |
| <u>hot spring</u> | 6. body of water heated by an underground magma pool |
| <u>pyroclastic flow</u> | 7. avalanche of red-hot dust and gases emitted by a volcano |
| <u>active</u> | 8. a volcano that is expected to erupt |

B. Mark the correct answers.

9. Mark two products of volcanoes.

- ☒ igneous rock
- ☐ mud pot
- ☒ soil rich in minerals and nutrients
- ☐ geyser

10. Mark two causes of volcanoes.

- ☒ heated magma rising to the earth's surface
- ☐ acid rain
- ☐ weather changes
- ☒ hot spot

Quiz 2-A

Name _____

A. Write *M* if the term is related to mechanical weathering.
Write *C* if the term is related to chemical weathering.

- C* 1. acid rain
- M* 2. frost heaving
- M* 3. exfoliation
- C* 4. oxidation
- C* 5. acid from lichens and mosses
- M* 6. abrasion

B. Complete the sentences.

carbonic acid oxidation stalactite stalagmite weathering

- weathering* 7. The process of breaking down rocks is called ____.
- Carbonic acid* 8. ____ forms when carbon dioxide dissolves in water.
- stalagmite* 9. Dripping dissolved calcite causes a ____ to build up on the floor of a cave.
- Oxidation* 10. ____ occurs when oxygen combines with what a rock is made of and forms new compounds.

Quiz 2-B

Name _____

Write the letter of the correct answer.

- B 1. multiple layers of soil
- A 2. unweathered rock that influences the texture of the soil above it
- C 3. decayed organic material
- E 4. a scientist who studies soil
- D 5. fertile soil that has equal parts of sand and silt combined with about half as much clay

- H 6. loose material at the surface of the earth
- F 7. largest kind of particle in soil
- G 8. allows water and air to mix in the soil
- I 9. amount of each kind of particle in a soil sample
- J 10. layer in which plants germinate and roots grow

A. bedrock
B. horizons
C. humus
D. loam
E. pedologist

F. sand
G. silt
H. soil
I. texture
J. topsoil

Quiz 2-C

Name _____

A. Label each statement as either *True* or *False*.

- _____ *False* 1. The primary force behind erosion is weathering.
- _____ *False* 2. Soil fall is gravity pulling soil down the slope of a hill.
- _____ *False* 3. Water, wind, and ice are three agents of gravity.
- _____ *True* 4. The speed that water moves affects the amount of sediment it can carry.
- _____ *True* 5. Moraines are piles of rocks and soil deposited by a glacier.

B. Write the letter of the correct answer.

- _____ *A* 6. _____ is the primary factor in mass movement.
A. Gravity B. The wind
- _____ *B* 7. The dropping of sediment and rocks in a new location is called _____.
A. deflation B. deposition
- _____ *B* 8. The sediment carried by a stream is its _____.
A. delta B. load
- _____ *A* 9. _____ occurs whenever the wind picks up loose sediment and carries it away.
A. Deflation B. Deposition
- _____ *B* 10. An area of sediment at the mouth of a river is called a _____.
A. moraine B. delta

Quiz 3-A

Name _____

A. Identify the resources and types of energy as renewable (*R*) or nonrenewable (*N*).

- N* 1. coal
- R* 2. geothermal energy
- R* 3. hydroelectric energy
- N* 4. natural gas
- N* 5. petroleum
- R* 6. wind energy
- R* 7. solar energy

B. Write the correct term.

- natural resources* 8. the materials available on Earth for man's use
- uranium* 9. a mineral used to produce nuclear energy
- fossil fuels* 10. what coal, natural gas, and petroleum are

Quiz 3-B

Name _____

A. Write the letter of the correct answer.

- D 1. a solid substance found naturally in the earth's surface that has never been alive
- C 2. able to be dented or shaped
- F 3. a process used to separate metal in ore from the other materials
- E 4. a material that has usable amounts of metal in it
- G 5. a concentrated area of specific minerals
- B 6. a valuable metal that often indicates wealth
- A 7. a strong, lightweight metal that is the most abundant metal in the earth's crust

A. aluminum
B. gold
C. malleable
D. mineral
E. ore
F. smelting
G. vein

B. Write the term that identifies the method of soil conservation described.

- contour plowing 8. prevents crops and soil from washing downhill
- ground cover 9. prevents soil erosion in unused fields
- fallow ground 10. land that is given a period of rest to allow natural processes to replenish the nutrients in the soil

Quiz 3-C

Name _____

A. Write the letter of the correct answer.

- B 1. All of Earth's water is referred to as the _____.
A. aquifers B. hydrosphere C. ocean
- C 2. Water falls to the earth as _____.
A. aquifers B. condensation C. precipitation
- B 3. Water returns to the sky through transpiration and _____.
A. precipitation B. evaporation C. condensation
- C 4. _____ happens when water vapor cools and changes into a liquid.
A. Precipitation B. Evaporation C. Condensation
- A 5. Layers of sand, gravel, or bedrock that hold or move ground water are called _____.
A. aquifers B. oceans C. humidity
- B 6. Water stored beneath the surface of the earth is called _____.
A. sea ice B. ground water C. humidity
- C 7. Floating pieces of glaciers, ice sheets, or ice shelves are called _____.
A. sea ice B. ice floes C. icebergs
- A 8. When ocean water freezes, _____ forms.
A. sea ice B. an iceberg C. a glacier
- B 9. _____ describes the water vapor in the air.
A. Hydrosphere B. Humidity C. Precipitation
- A 10. _____ are tiny ocean organisms that carry on photosynthesis.
A. Phytoplankton B. Plants C. Aquifers

Quiz 4-A

Name _____

A. Fill in the blank for the characteristics of living things.

- _____ *develop* 1. Living things grow and _____.
_____ *environments* 2. Living things respond to their _____.
_____ *energy* 3. Living things use _____.
_____ *cells* 4. Living things are made of _____.

B. Write the letter of the correct answer.

- _____ *A* 5. the organelles inside a cell that break down food and release energy
A. mitochondria B. cytoplasm
- _____ *A* 6. the jellylike substance inside the cell membrane
A. cytoplasm B. ribosome
- _____ *B* 7. an instrument that uses lenses to magnify objects
A. balance B. microscope
- _____ *B* 8. the external boundary for the material inside a cell
A. cell wall B. cell membrane
- _____ *B* 9. the circular organelle that contains the DNA
A. vacuoles B. nucleus
- _____ *A* 10. the structure found in plant cells that contains green pigment
A. chloroplast B. chlorophyll

Quiz 4-B

Name _____

A. Write the letter of the correct answer.

- B 1. organisms that live in conditions poisonous to other living things
- A 2. always multicellular organisms—kingdom Plantae and _____
- D 3. unicellular organisms that may have chlorophyll in their cells
- C 4. yeast, mold, and mushrooms

A. kingdom Animalia
B. kingdom Archaeobacteria
C. kingdom Fungi
D. kingdom Protista

B. Write the letter of the correct answer.

- B 5. A group of the same kind of organisms living together is called a _____.
A. ribosome B. colony
- B 6. The process of grouping organisms with similar characteristics is called _____.
A. colonizing B. classification
- A 7. _____ are the smallest living things.
A. Bacteria B. Protozoans
- B 8. The process of converting sunlight to sugar is called _____.
A. cell division B. photosynthesis
- A 9. The process through which an organism grows and replaces cells is called _____.
A. mitosis B. meiosis
- B 10. The process through which an organism produces reproductive cells is called _____.
A. mitosis B. meiosis

Quiz 5-A

Name _____

A. Write the letter of the correct answer.

- C 1. have soft bodies and mantles; mantle sometimes forms a shell
- A 2. segmented worms; may have setae
- B 3. radial symmetry; tube feet; live in the water

A. annelids
B. echinoderms
C. mollusks

B. Write the correct term.

- bilateral 4. the type of symmetry having two identical sides when divided down the middle
- nematocyst 5. a tiny stinging organelle found on some animals
- radial 6. the type of symmetry having body parts that repeat around a central part
- filter feeder 7. an animal that eats organisms that float through the water
- free-living 8. the ability to exist independent of another organism
- parasite 9. lives on or in another living organism (host) and depends on the host for food
- invertebrates 10. a characteristic that most animal phyla have in common

Quiz 5-B

Name _____

A. Write the letter of the correct answer.

- A 1. All arthropods have _____.
A. jointed legs, a segmented body, and an exoskeleton
B. 3 pairs of legs, 3 body parts, and wings
- B 2. Arthropods molt because _____.
A. they are active at night
B. they outgrow their exoskeleton and grow a new one
- A 3. Arthropods with many body segments and many pairs of legs may be either _____.
A. centipedes or millipedes
B. arachnids or crustaceans
- B 4. Spiders and ticks are examples of _____.
A. insects
B. arachnids
- B 5. _____ are examples of crustaceans.
A. Mites and scorpions
B. Crabs and shrimp
- A 6. The stages of _____ metamorphosis are egg, nymph, and adult.
A. incomplete
B. complete
- B 7. The stages of _____ metamorphosis are adult, egg, larva, and pupa.
A. incomplete
B. complete

B. Write the letter of the correct answer.

- B 8. has 5 pairs of legs, has 2 pairs of antennae, breathes through gills, and most have a claw
- A 9. has 2 body segments and 8 legs
- C 10. has 3 body segments, 3 pairs of legs, and most have wings

A. arachnid
B. crustacean
C. insect

Quiz 5-C

Name _____

A. Write the letter of the correct answer.

- B* 1. warm-blooded animal with feathers
- D* 2. warm-blooded animal with hair; feeds its young with milk
- E* 3. cold-blooded animal with scaly skin; lays eggs on land
- A* 4. cold-blooded animal with smooth skin; spends part of its life in water and part on land
- C* 5. cold-blooded animal that breathes through gills; skeleton is made of cartilage or bone

A. amphibian
B. bird
C. fish
D. mammal
E. reptile

B. Write the correct word.

- bat* 6. the only mammal that can fly
- monotremes* 7. mammals that lay eggs
- blubber* 8. fatty layer that insulates some animals
- herbivores* 9. animals that eat only plants
- nocturnal* 10. animals that are active during the night

Quiz 6-A

Name _____

A. Write the letter of the correct answer.

- E 1. plants with roots and tubelike structures that transport water, food, and nutrients
- B 2. plants that have rhizoids and that absorb water through their leaves
- D 3. ferns and horsetails grow from these underground stems
- A 4. leafy branches of a fern
- C 5. thin rootlike structures of mosses

A. fronds
B. nonvascular
C. rhizoids
D. rhizomes
E. vascular

B. Write the letter of the correct answer.

- C 6. Which plant is nonvascular?
A. conifer B. fern C. moss
- B 7. Which plant is a seedless vascular plant?
A. conifer B. fern C. moss
- B 8. Which type of plant produces seeds that usually develop inside a cone?
A. angiosperm B. gymnosperm C. moss
- A 9. Which type of plant produces flowers and fruit?
A. angiosperm B. gymnosperm C. liverwort
- C 10. What protects a broken pine branch from disease and insects?
A. rhizome B. rhizoid C. resin

Quiz 6-B

Name _____

A. Label each statement as either *True* or *False*.

- _____ *True* 1. Cotyledons are tiny seed leaves of the plant embryo that contain stored food for the seed.
- _____ *False* 2. Most monocots have taproots and woody stems.
- _____ *False* 3. Dicots have long, narrow leaves with parallel veins.
- _____ *True* 4. Roots absorb water and nutrients, affect the size and health of the plant, and help to anchor the plant in the soil.

B. Write the letter of the correct answer.

- _____ *E* 5. describes angiosperms that can live for three or more years
- _____ *F* 6. arranged in a circle in a dicot's stem
- _____ *B* 7. describes angiosperms that need two growing seasons to fully develop
- _____ *D* 8. describes a seed with only one cotyledon
- _____ *A* 9. describes angiosperms that live for only one growing season
- _____ *C* 10. describes a seed with two cotyledons

A. annual
B. biennial
C. dicot
D. monocot
E. perennial
F. vascular tissue

Quiz 6-C

Name _____

A. Write the letter of the correct answer.

- A 1. layer of cells that reproduce to make more xylem and phloem, allowing the plant to grow wider each year
- F 2. tubes that carry water and minerals from the roots to the top of the plant
- C 3. tubes that carry sugars and foods throughout the plant
- B 4. many thin roots that spread out in all directions
- D 5. root that continues to grow straight down into the soil and may have other roots branching off of it
- E 6. the grouping of tubes that carry water and food to all parts of the plant

- A. cambium
- B. fibrous roots
- C. phloem
- D. taproot
- E. vascular bundles
- F. xylem

B. Mark two answers for each.

7–8. the jobs of a stem

- ☒ provides support
- ☐ shades roots
- ☒ transports water, food, and nutrients

9–10. things learned from looking at tree rings

- ☒ age of tree
- ☒ health of tree
- ☐ height of tree

Quiz 7-A

Name _____

A. Write the letter of the correct answer.

- C 1. vertical columns of the periodic table
- E 2. center part of an atom
- G 3. has a positive charge; located in the nucleus
- F 4. horizontal rows of the periodic table
- B 5. has a negative charge; travels around the nucleus
- A 6. smallest piece of an element that can be recognized as that element
- D 7. has no charge; located in the nucleus

A. atom
B. electron
C. groups
D. neutron
E. nucleus
F. periods
G. proton

B. Write the letter of the correct answer.

- B 8. The number of protons plus neutrons is the atom's approximate _____.
A. atomic number C. atomic model
B. atomic mass D. atomic nucleus
- D 9. Dmitri Mendeleev developed the periodic table of the elements, which _____ elements.
A. weighs C. measures
B. alphabetizes D. classifies
- C 10. Abbreviations for the names of elements are chemical _____.
A. shells C. symbols
B. periods D. families

Quiz 7-B

Name _____

A. Write the letter of the correct answer.

- F 1. formed when atoms combine
- C 2. molecules formed from two or more different elements
- A 3. symbols and numbers abbreviating the name of a compound
- E 4. an atom that has gained or lost electrons
- G 5. a reaction in which molecules combine to form a new substance
- B 6. the process in which different types of atoms join and form a new substance
- D 7. a reaction in which a compound is broken down into simpler compounds

A. chemical formula
B. chemical change
C. compound
D. decomposition reaction
E. ion
F. molecule
G. synthesis reaction

B. Write the correct word.

- shells 8. Atoms bond with other atoms to complete their outer ____.
- electrons 9. The atoms share ____ in a covalent bond.
- attract 10. An ionic bond forms when positively and negatively charged ions ____ each other.

Quiz 7-C

Name _____

A. Identify each characteristic as belonging to an acid (A), a base (B), or both (C).

- A 1. can burn or corrode
- C 2. changes colors of an indicator
- B 3. bitter taste
- A 4. sour taste
- B 5. slippery

B. Label each statement as either *True* or *False*.

- False 6. Acids that dissolve in water are called alkalis.
- True 7. A neutral solution is neither acidic nor basic.
- False 8. The pH scale is used to determine neutral solutions of a substance.
- True 9. Hydrogen ions form when acids are dissolved in water.
- True 10. A reaction between an acid and a base can form a salt.

Quiz 8-A

Name _____

A. Write the letter of the correct answer.

- A 1. a material that does not allow electricity to flow through it
A. insulator B. resistor
- A 2. a circuit that has multiple paths through which electricity can flow
A. parallel B. series
- B 3. a circuit that has only one path through which electricity can flow
A. parallel B. series
- B 4. a material that reduces the flow of electricity
A. conductor B. resistor
- A 5. a material that allows electricity to flow through it easily
A. conductor B. insulator

B. Write the correct term.

- volt 6. a measurement of the amount of electrical push, or force, in a circuit
- watt 7. the measurement of power, or how fast work is done
- ampere 8. the unit that measures how much current flows through a given part of a circuit in one second
- electrolyte 9. a liquid or paste substance that conducts electricity
- battery 10. a power source containing one or more electric cells

Quiz 8-B

Name _____

A. Label each statement as either *True* or *False*.

- _____ *True* 1. The strength of an electromagnet may be affected by the size and shape of its core.
- _____ *True* 2. The flow of electricity can produce a magnet, and a magnet moving around or in wire can produce electricity.
- _____ *False* 3. William Sturgeon discovered that a current traveling through a wire produces a weak magnetic field in the live wire.
- _____ *False* 4. Magnetic force is strongest at the center of a magnet.
- _____ *False* 5. Joseph Henry and Michael Faraday discovered that moving a magnet around or through a loop of wire produces electricity in the wire.

B. Write the letter of the correct answer.

- _____ *C* 6. uses a magnet to convert motion into electrical energy
- _____ *A* 7. what opposite poles do when brought near each other
- _____ *B* 8. a coil of wire with a core attached to an electrical source
- _____ *D* 9. any material that has the ability to attract iron
- _____ *E* 10. what the same poles do when brought near each other

- A. attract
- B. electromagnet
- C. generator
- D. magnet
- E. repel

Quiz 8-C

Name _____

A. Write the letter of the correct answer.

- F 1. a material that can work as a conductor or as an insulator
- B 2. an electric current that carries information
- C 3. a very small circuit with all its components in a single unit
- A 4. a code used by electronic devices to communicate information
- D 5. part of a computer that stores facts temporarily
- E 6. part of a computer that contains the built-in memory and programs

- A. binary number system
- B. electrical signal
- C. integrated circuit
- D. RAM
- E. ROM
- F. semiconductor

B. Complete the sentences.

- inexpensive 7. Integrated circuits are small, _____, and durable.
- microchip 8. Another name for an integrated circuit is a _____.

Quiz 9-A

Name _____

A. Write the correct term.

acceleration

friction

momentum

motion

velocity

motion

1. the change of an object's position

friction

2. a force that keeps objects from moving against other objects

momentum

3. determined by the mass and velocity of an object

velocity

4. the speed of a moving object in a given direction

acceleration

5. occurs whenever an object speeds up, slows down, or changes direction

B. Write the letter of the correct answer. Answers may be used more than once.

A. Force is equal to the mass of an object and its acceleration.

B. When one object exerts a force on another object, the second object reacts by exerting an equal force back on the first object.

C. An object at rest tends to stay at rest, and an object in motion tends to stay in motion with the same direction and speed.

C

6. First Law of Motion

A

7. Second Law of Motion

B

8. Third Law of Motion

A

9. Ruth likes to play softball and go bowling. She uses less force to throw a softball than she uses when she rolls a bowling ball.

C

10. Dad slammed on the brakes when a ball bounced out in front of our car. My sister's doll that had been on the back seat ended up on the floor.

Quiz 9-B

Name _____

A. Write the correct term.

- _____ *work* 1. When a force moves an object a certain distance, _____ is done.
- _____ *machine* 2. Any object that makes work easier is called a _____.
- _____ *inclined planes* 3. Wedges and screws are two simple machines that actually consist of _____.
- _____ *mechanical* 4. The decrease in effort that is needed to move an object is called _____ advantage.

B. Write the letter of the correct answer.

- _____ *F* 5. doorknob
- _____ *C* 6. flagpole
- _____ *E* 7. knife blade
- _____ *A* 8. ramp
- _____ *D* 9. jar lid
- _____ *B* 10. broom

- A. inclined plane
- B. lever
- C. pulley
- D. screw
- E. wedge
- F. wheel and axle

Quiz 10-A

Name _____

A. Write the letter of the correct answer.

- D 1. a neutron star that spins rapidly on its axis
- E 2. the death explosion of a star
- B 3. an existing star that flares up and becomes brighter than normal
- F 4. stars that regularly or repeatedly change in magnitude
- C 5. a star's apparent movement in relationship to other stars
- A 6. the brightness of a star

- A. magnitude
- B. nova
- C. parallax
- D. pulsar
- E. supernova
- F. variable stars

B. Fill in the blanks.

- Absolute 7. _____ magnitude is how bright a star really is.
- apparent 8. How bright a star looks to us is called _____ magnitude.
- sun 9. The closest star to Earth is the _____.
- nebula 10. A cloud of interstellar gases and debris is a _____.

Quiz 10-B

Name _____

A. Label each statement as either *True* or *False*.

- _____ *False* 1. Refracting telescopes use mirrors to reflect light to make objects appear larger.
- _____ *True* 2. Radio telescopes collect radio waves to detect objects in space that do not give off enough light to be seen by other telescopes.
- _____ *True* 3. A binary system contains two stars held together by gravitational attraction.
- _____ *True* 4. Star systems that have three or four stars are called multiple star groups.
- _____ *False* 5. The scientific study of the stars is called astrology.
- _____ *False* 6. An open star cluster is a constellation that revolves around the North Star.

B. Write the letter of the correct answer.

- _____ *D* 7. meteoroid that lights up as it passes through Earth's atmosphere
- _____ *C* 8. meteoroid that passes through Earth's atmosphere and hits Earth
- _____ *A* 9. an irregularly shaped piece of rock, metal, and dust
- _____ *B* 10. an icy chunk of frozen gases, water, and dust that orbits the sun

- A. asteroid
B. comet
C. meteorite
D. meteor

Quiz 11-A

Name _____

A. Write the letter of the correct answer.

- D 1. the surface of the sun
- E 2. created by solar storms exploding from the photosphere
- C 3. the outermost part of the sun
- A 4. energy emitted in the form of beautiful colors
- B 5. the atmosphere of the sun

A. aurora
B. chromosphere
C. corona
D. photosphere
E. solar flares

B. Write the letter of the correct answer.

- A 6. An unmanned research spacecraft sent beyond Earth's orbit is called a _____.
A. probe
B. satellite
C. shuttle
- B 7. Any object that orbits another object in space is called a _____.
A. probe
B. satellite
C. shuttle
- B 8. Each orbit that a planet makes around the sun is called a(n) _____.
A. eclipse
B. revolution
C. rotation
- C 9. The complete turn of a planet on its axis is called a(n) _____.
A. eclipse
B. revolution
C. rotation
- C 10. Dark spots on the photosphere of the sun are called _____.
A. magnetic storms
B. solar prominences
C. sunspots

Quiz 11-B

Name _____

A. Write the name of the correct planet.

- _____ *Venus* 1. closest to Earth; brightest object in the morning and evening skies
- _____ *Mercury* 2. closest to the sun
- _____ *Earth* 3. able to sustain life
- _____ *Mars* 4. the red planet

B. Write the letter of the correct answer.

- _____ *A* 5. For a solar system object to be considered a planet it must orbit the sun, be large enough for its own gravity to keep it in the shape of a sphere, and not share its _____ with objects of similar size.
A. orbit B. atmosphere
- _____ *B* 6. Jupiter, Neptune, Saturn, and Uranus are the _____.
A. inner planets B. outer planets
- _____ *A* 7. Earth, Mars, Mercury, and Venus are the _____.
A. inner planets B. outer planets
- _____ *B* 8. The inner planets are also known as _____ because they are dense and composed of rocks.
A. earth giants B. terrestrial planets
- _____ *B* 9. A _____ occurs when the moon passes between the earth and the sun.
A. lunar eclipse B. solar eclipse
- _____ *A* 10. A _____ occurs when the moon passes through the shadow of the earth.
A. lunar eclipse B. solar eclipse

Quiz 11-C

Name _____

A. Write the letter of the correct answer.

- C 1. the “ringed planet”
- D 2. the blue-green planet that rotates on its side
- B 3. the planet with the most violent weather
- A 4. the largest planet

A. Jupiter
B. Neptune
C. Saturn
D. Uranus

B. Write the letter of the characteristic for each description.

- C 5. produced by its atmosphere of poisonous methane gas
- A 6. possibly a huge hurricane
- B 7. made of small frozen particles that reflect light

A. Jupiter’s Great Red Spot
B. Saturn’s rings
C. Uranus’s color

C. Label each characteristic **P** if it describes a planet or **D** if it describes a dwarf planet. Some may have both answers.

- P, D 8. is spherical and orbits the sun
- D 9. can share its orbit with another object of similar size
- P 10. cannot share its orbit with another object of similar size

Quiz 12-A

Name _____

A. Write the correct word.

- _____ *Pollination* 1. _____ occurs when a grain of pollen is transferred from an anther to the stigma of a flower.
- _____ *fruit* 2. The part of the plant that contains the seeds is called the _____.
- _____ *stamen* 3. The _____ is the male part of the flower.
- _____ *pistil* 4. The _____ is the female part of the flower.
- _____ *zygote* 5. A fertilized egg cell, called a _____, develops into an embryo.

B. Write the letter of the correct answer in the blank.

- _____ *A* 6. occurs when pollen is transferred from one plant to a different plant
A. cross-pollination B. self-pollination
- _____ *B* 7. produced by male cones in conifers
A. anther B. pollen
- _____ *A* 8. smaller than a seed and consists of only one cell; does not contain any stored food for the new plant
A. spore B. cotyledon
- _____ *B* 9. the part of the pistil that develops into the fruit of the plant
A. filament B. ovary
- _____ *A* 10. usually pollinates conifers
A. wind B. insects

Quiz 12-B

Name _____

A. Label each statement as either *True* or *False*.

- _____ *True* 1. An egg provides protection, nutrients, food, and waste removal for the developing animal.
- _____ *False* 2. The embryo develops into the zygote.
- _____ *True* 3. A baby marsupial mammal finishes developing in its mother's pouch.
- _____ *True* 4. The period of time during which a mammal develops inside its mother's body is called gestation.

B. Write the letter of the correct answer.

- _____ *D* 5. An organism, such as a planarian, breaks into many fragments. Each fragment can grow into a new organism.
- _____ *B* 6. A unicellular organism, such as an amoeba, can duplicate its nucleus and divide into two cells. Each new cell is an independent organism.
- _____ *E* 7. If a part of an organism, such as a sea star, is broken off and contains part of its center, then the broken piece can regrow into a new organism.
- _____ *A* 8. This is the process of reproducing from only one parent.
- _____ *F* 9. A part of a plant that usually is not involved in reproduction develops into a new plant.
- _____ *C* 10. A new individual develops on the parent organism and grows until it is able to survive on its own. It then breaks off from the parent and lives independently.

- A. asexual reproduction
- B. binary fission
- C. budding
- D. fragmentation
- E. regeneration
- F. vegetative reproduction

Quiz 13-A

Name _____

A. Write the letter of the correct answer in each blank.

- D 1. the passing of traits from parents to offspring
- E 2. physical characteristics that you inherited from your parents
- C 3. small sections of DNA that determine many traits
- B 4. molecule that carries the chemical code that tells cells what to do
- A 5. contain DNA

A. chromosomes
B. DNA
C. genes
D. heredity
E. traits

B. Label each statement as either *True* or *False*.

- False 6. All organisms have the same DNA pattern.
- False 7. The DNA rungs are formed from molecules called spirals.
- True 8. The shape of a DNA molecule is called a double helix.
- True 9. Within the organism, every cell has the same DNA pattern.
- False 10. Watson and Wilkins discovered the structure of DNA.

Quiz 13-B

Name _____

A. Write the letter of the correct answer.

- E 1. a chart that shows the genetic possibilities of a certain trait in the offspring of a specific pair of parents
- C 2. a chart that traces a trait through generations of family members
- F 3. plants that show the same trait for many generations when pollinated naturally
- B 4. a plant produced by crossing purebred parent plants that each have different forms of the same trait
- D 5. the physical appearance of an organism
- A 6. the arrangement of genes within an organism

A. genotype
B. hybrid
C. pedigree
D. phenotype
E. Punnett square
F. purebred

B. Write the letter of the correct answer.

- B 7. ____ occurs when genes for a trait blend together.
A. Codominance B. Incomplete dominance
- A 8. A ____ is a characteristic that is shown in the hybrid generation.
A. dominant trait B. recessive trait
- B 9. ____ experimented with pea plants to study how traits were passed on from generation to generation.
A. Reginald Punnett B. Gregor Mendel
- B 10. In Mendel's experiments, the *P* generation refers to purebred ____.
A. offspring B. parent plants

Quiz 13-C

Name _____

A. Write the letter of the correct answer.

- B 1. _____ is not contagious but is inherited as it is passed from parent to child.
A. Genetic engineering B. A genetic disease
- A 2. _____ involves changing a gene in an organism or moving a gene from one organism to another.
A. Genetic engineering B. A genetic disease
- A 3. _____ occurs when some red blood cells are hard and curved.
A. Sickle cell anemia B. Cystic fibrosis
- B 4. _____ can occur when a chromosome makes an extra copy of itself, which may cause disabilities.
A. Sickle cell anemia B. Down syndrome
- B 5. Symptoms of _____ include thick mucus that clogs air passages and digestive problems.
A. Down syndrome B. cystic fibrosis

B. Fill in the blank.

- medicine 6. An example of genetic engineering in _____ is using bacteria to produce insulin for diabetics.
- plants 7. An example of genetic engineering of _____ is adding genes to cause them to taste bad to harmful insects.
- animals 8. An example of genetic engineering of _____ is adding genes to cause them to grow larger and faster with fewer diseases.

Quiz 14-A

Name _____

A. Write the letter of the correct answer in each blank.

- B 1. consists of the brain and spinal cord; makes decisions and controls the body's actions
- E 2. consists of neurons all over the body; communicates about what goes on in and around the body
- F 3. the main pathway of information that connects the brain to the rest of the body
- D 4. a nerve cell
- G 5. the gap between neurons over which impulses cross
- C 6. receives the electrical impulse from another neuron
- A 7. sends the electrical impulse on to the next neuron

- A. axon
- B. central nervous system
- C. dendrite
- D. neuron
- E. peripheral nervous system
- F. spinal cord
- G. synapse

B. List the three parts of the brain. *Order of answers may vary.*

8. cerebrum
9. cerebellum
10. brain stem

Quiz 14-B

Name _____

A. Write the correct term.

- _____ *nervous* 1. Senses rely on the _____ system to function.
- _____ *brain* 2. Senses gather information that is sent by neurons to the _____ to be interpreted.
- _____ *eye* 3. The _____ does not actually “see” but provides sensory information to the brain.
- _____ *upside down* 4. The image the brain receives from the eye is _____.
- _____ *the Bible* 5. Because your senses adapt to your environment, the information they gather may be inaccurate. The only truly accurate source of information is _____.

B. Write the letter of the correct answer.

- _____ *C* 6. The olfactory nerve sends impulses from the _____ to the brain.
- _____ *E* 7. The sense of _____ is the only sense located all over your body.
- _____ *A* 8. The auditory nerve carries impulses from the _____ to the brain.
- _____ *D* 9. Your sense of _____ is affected by the sense of smell.
- _____ *B* 10. The brain is connected to the _____ by the optic nerve.

- A. ear
- B. eye
- C. nose
- D. taste
- E. touch

Quiz 14-C

Name _____

A. Write the letter of the correct answer.

- B 1. The nervous system ____ while a person sleeps.
A. shuts down and rests B. remains active
- B 2. Looking up and remembering a phone number to call is an example of ____ memory.
A. long-term B. short-term
- A 3. Remembering how to talk is an example of ____ memory.
A. long-term B. short-term
- A 4. ____ causes neurons in the brain to send impulses too quickly and irregularly.
A. Epilepsy B. Multiple sclerosis
- B 5. ____ causes damage to brain cells that control thinking processes.
A. Parkinson's disease B. Alzheimer's disease
- A 6. Cocaine and marijuana are drugs that change the way ____ sends and receives information.
A. the brain B. a hormone

B. Label each statement as either *True* or *False*.

- True 7. REM sleep may be one of the ways that the brain sorts through and organizes all the information received throughout the day.
- False 8. The pituitary gland produces impulses that control other glands in the body.
- True 9. Chemical messengers (hormones) influence almost all cells, organs, and bodily functions.
- True 10. The endocrine glands produce most of the body's hormones.

Quiz 15-A

Name _____

A. Write the correct answer(s).

- Adam's sin 1. cause of disease and pain in the world
- pathogen 2. anything that causes disease
- vectors 3. animals that carry pathogens
- epidemiologist 4. a scientist who studies the causes and spread of diseases
- bacteria 5. causes most infections
- Possible answers: air, 6. three ways pathogens can be spread
contact, contaminated
food, contaminated
water, vectors

B. Write the letter of the correct answer.

- D 7. four common pathogens: fungi, bacteria, viruses, and _____
- B 8. a disease that spreads to many people in a short period of time
- A 9. a contagious disease
- C 10. a noncontagious disease

- A. communicable disease
- B. epidemic
- C. noncommunicable disease
- D. protozoans

Quiz 15-B

Name _____

A. Write the letter of the correct answer.

- B 1. Special proteins produced by white blood cells that can destroy pathogens are called _____.
A. antibiotics B. antibodies
- A 2. The body's specific defense is called the _____.
A. immune response B. inflammatory response
- B 3. Chemicals made by microorganisms that are able to destroy other microorganisms are called _____.
A. antibiotics B. antibodies
- B 4. White blood cells that remember pathogens and the specific antibodies needed to defeat them are called _____.
A. macrophages B. memory cells
- A 5. When white blood cells mistakenly identify harmless foreign particles as an enemy, an _____ may happen.
A. allergic reaction B. antibody

B. Label each statement as either *True* or *False*.

- True 6. Some pathogens can be killed by fevers.
- True 7. Nonspecific defenses include an increase of white blood cells and an inflammatory response.
- False 8. Louis Pasteur discovered that a mold called penicillin kills bacteria.
- True 9. An autoimmune disease occurs when the immune system attacks healthy cells that it should protect.
- True 10. Scabs, sweat, tears, and earwax are some of the body's defensive barriers.