

Ged Science Exam

1. A series circuit is one in which current flows only in one path. The same amount of current flows through the entire circuit when it is in series, and each bulb receives the same amount of current. If there is a break in the circuit, none of the bulbs will light.

A. a chandelier

B. car headlights with high and low beams

C. a string of lights that goes out at the same time if one bulb burns out

D. fluorescent ceiling lights

E. ceiling light fixture with 3 lightbulbs

Answer(s): C

2. Getting rid of solid waste is a major problem in many cities. Open spaces for landfills are becoming scarce. Burning solid waste may produce harmful gases as well as particles in the surrounding air. Recycling is useful, but effective techniques for recycling some materials have yet to be developed. Marine disposal may damage the delicate ecosystems in this fragile environment.

A. landscaping

B. burning

C. landfills

D. recycling

E. marine disposal

Answer(s): B

3. An autotroph is an organism that can make its own food. A heterotroph, an organism that is unable to make its food, relies on other living things for food and energy.

A. deer

B. bird

C. snake

D. tree

E. frog

Answer(s): D

4. A tsunami is an unusually large ocean wave, which is sometimes formed by earthquakes.

A. Tsunamis travel at 100 miles per hour.

B. There are no known causes of tsunamis.

C. Tsunamis are sometimes found in small lakes.

D. Tsunamis have killed millions of people in this century.

E. The height of a tsunami located 100 miles offshore is low.

Answer(s): E

5. Absorption is a process by which substances take in matter. During absorption, the matter becomes dispersed throughout the absorbing material.

A. water held in a sponge

B. a candle burning

C. margarine melting in a frying pan

D. ice freezing in a tray

E. writing on paper with a lead pencil

Answer(s): A

6. Different enzymes in the human digestive system can digest food material only at specific levels of acidity (pH).

A. Food is digested only in the stomach.

B. Much of the food we eat cannot be digested.

C. Enzymes become active in the large intestine.

D. The digestive system contains few enzymes.

E. Different enzymes are active in different parts of the digestive system.

Answer(s): E

7. The death rate from heart disease fell more than 8 percent in just one year during the 1980s. Advances in public awareness of heart disease and in treatments for it are thought to be partially responsible for the decline. New heart drugs, a technique called angioplasty for clearing the arteries, and surgical advances have also assisted in reducing heart disease fatalities, as has increased interest in a healthy lifestyle and diet.

A. More people regularly slept 8 hours per night.

B. Exercise fads became less popular.

C. Sunscreen products were used more frequently.

D. More people used the "buddy system" while engaging in strenuous activities.

E. New kinds of heart medicine became available for public use.

Answer(s): E

8. Flowers are the reproductive part of some plants. The stamen is the male reproductive organ while the pistil is the female organ. At the tip of the stamen is the anther, which forms pollen grains in which the sperm cells are formed. Pollen grains are transferred to the pistil by wind, water, insects, and other mechanisms.

A. Pollen grains produce the egg cells.

B. The stamen produces the egg cells.

C. Sperm cells are produced in the pistil.

D. The pollen grains serve merely as food for insects.

E. Bees may distribute pollen to other flowers.

Answer(s): E

9. A family wants to plant a garden, but the soil around the house is mainly clay. Clay soil easily becomes saturated with water, cutting off the air supply needed by plants. Adding sand and peat moss can help plants grow in clay soil.

A. Dig deep holes and keep them filled with water for several weeks.

B. Wait until midsummer before trying to plow or spade the soil.

C. Mix sand and peat moss with the soil while it is fairly dry.

D. Plant only in sand or peat moss.

E. Wet the soil thoroughly for a week before trying to plow or spade it.

Answer(s): C

10. Which household compound is hazardous when combined with sodium hypochlorite, which is found in bleach?

A. lemon juice

B. ammonia solution

C. dilute sodium hydroxide solution

D. 5% alcohol solution

E. cooking oil

Answer(s): B

11. The diagram above illustrates the feet of five species of birds. Each foot is particularly well

A. earthworm

B. frog

C. cat

D. honeybee

E. grasshopper

Answer(s): B

12. Wild rabbits in Alaska have short ears, whereas those found in Arizona have long ears. For the Alaskan rabbits, this is an adaptation to which of the following?

A. meager food supplies

B. amount of precipitation

C. parasitic fungi

D. cold temperatures

E. number of predators

Answer(s): D

13. Andrew is pushing a heavy crate up a ramp. The crate tends to slide back down the ramp and is thus hard to push up.

A. Friction already exists between the crate and ramp before adding a mat.

B. The increased friction will make the crate heavier.

C. The increased friction will make the crate harder to push up.

D. A rubber mat would need to be large enough to cover the entire ramp.

E. Friction would be a serious factor only if the crate were larger.

Answer(s): C

14. Temperature affects how well gases and solids dissolve to form solutions. Gas solubility increases with decreasing temperature. Cold water can hold more oxygen than warm water.

A. sunny areas because there is more dissolved oxygen gas in warm water

B. shady areas because there is less dissolved oxygen gas in cool water

C. sunny areas because there is no dissolved oxygen gas in warm water

D. shady areas because there is more dissolved oxygen gas in cool water

E. both shady and sunny areas because the amount of dissolved oxygen gas in water is not changed by temperature

Answer(s): D

15. Based on the information, which statement accurately describes cloud formation?

A. only at low altitudes

B. when condensation occurs around suspended particles in the atmosphere

C. only at high altitudes

D. when air temperature is above dew point

E. when dry, warm air evaporates in the atmosphere

Answer(s): B

16. Simple machines reduce the amount of force needed to do work such as lifting an object. The simple machine shown below is a lever. A downward force on one end of a lever moves the other end up. A playground seesaw or a crowbar are common examples of levers.

A. next to the box

B. at point D

C. at point B

D. at point A

E. at point C

Answer(s): B

17. Using new, advanced methods of biotechnology, scientists can produce copies of genes of one species and insert them into the chromosomes of another species. The resulting transgenic plants offer potential advantages that are unobtainable through conventional methods.

A. The corn plants will be taller.

B. The plants will resist corn borers.

C. The corn will have a better flavor.

D. The bacteria will infect the plants.

E. The plants will wither and die.

Answer(s): B

18. Rosa fills five small aquariums with equal amounts of pond water. She places various combinations of fish, plants, and/or snails in each aquarium except A, which contains only pond water. Rosa seals all the aquariums and stores them at room temperature under an aquarium light. The light provides the energy for photosynthesis in green plants and production of food and oxygen.

A. E

B. A

C. D

D. C

E. B

Answer(s): D

19. The microorganisms that cause food to spoil grow best at room temperature and in the presence of water.

A. freezing the food

B. keeping the food at room temperature

C. adding water to the food

D. covering the food while warm

E. exposing the food to air

Answer(s): A

20. Nitrites are used by the meat-packing industry to maintain the appetizing red color of cured meats and smoked fish and to protect the consumer from botulism. However, in the acid environment of the stomach, nitrites can combine with amines to form nitrosamines, which are potent carcinogens.

A. Eat meats such as canned hams and bacon.

B. Increase the consumption of fresh vegetables.

C. Eat only at fast food restaurants.

D. Limit the amount of cured meats and smoked fish consumed.

E. Take large doses of antacids after eating cured meats and smoked fish.

Answer(s): D
