Environment and You 2nd Edition Christensen Test Bank

Full Download: https://alibabadownload.com/product/environment-and-you-2nd-edition-christensen-test-bank/

Name\_\_\_\_\_

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

<ol> <li>The most essential compound needed to sustain life as we know it is</li> </ol>					1)	
A) carbonyurate B) ozone	25					
C) oxygen						
D) water						
E) carbon dioxi	de					
Answer: D						
2) What is an element?					2)	
A) two or more	atoms held together	by chemical bonds				
B) one or more	B) one or more molecules held together by chemicals					
C) a chemical that cannot be broken down or separated into other chemicals						
D) a chemical th	at cannot be separat	ed, but is limited in	n supply			
E) a chemical th	at can be broken do	wn or separated int	o other chemicals			
Answer: C						
3) What is the basic subunit of elements?					3)	
A) electrons	B) molecules	C) neutrons	D) atoms	E) protons		
Answer: D						
4) Molecules are	·				4)	
A) atoms of an $\epsilon$	element					
B) basic subunit	ts of elements					
C) a chemical th	at cannot be broken	or separated				

D) positively charged particles

E) two or more atoms held together by chemical bonds

Answer: E

5) Which is the most important molecule in the ecosystem?
A) lead B) salt C) nitrogen D) oxygen E) water
Answer: E
6) Compounds are \_\_\_\_\_\_.
A) molecules that are made of more than one element
B) atoms that are electrically charged
C) molecules that have mass
D) molecules that are held together by atoms

1

E) atoms that are radioactive

Answer: A

7) Cells and tissue A) water B) cellulose C) carbon diox D) hydrogen E) salt Answer: A	es of all organisms kide	are made primarily	of		7)
8) Which number	indicates neutral of	on a pH scale?			8)
A) 1	B) 5	C) 3	D) 9	E) 7	
Answer: E					
<ul> <li>9) Most organic compounds are made up of</li> <li>A) nitrogen, oxygen, and carbon dioxide atoms</li> <li>B) carbon, hydrogen, and oxygen atoms</li> <li>C) carbon, nitrogen, and water atoms</li> <li>D) carbon, hydrogen, and nitrogen atoms</li> <li>E) carbon, nitrogen, and ozone atoms</li> </ul>					9)
<ul> <li>10) The stratospheric ozone layer is important to ecosystems because it</li> <li>A) keeps atmospheric gases balanced</li> <li>B) absorbs and scatters UV light</li> <li>C) keeps the temperature of Earth stable</li> <li>D) ensures lakes and oceans do not lose water</li> <li>E) provides the air we breathe</li> <li>Answer: B</li> </ul>					10)
11) The most basic source of immediate energy for most organisms is					11)

A) lipids B) starches C) water D) glucose E) amino acids Answer: D

12) The pH scale is a quantitative representation of the relative amounts of \_\_\_\_\_\_.

12)

A) hydrogen and hydroxyl ions in solution

B) alkaline and basic ions in solution

C) hydrogen and polar water molecules in solution

D) water and carbon dioxide molecules in solution

E) hydrogen and oxygen ions in solution

Answer: A

<ul> <li>13) Natural gas is pr</li> <li>A) carbon dioxi</li> <li>B) oxygen</li> <li>C) methane</li> <li>D) hydrogen</li> <li>E) nitrogen</li> </ul>	rimarily composed ide	of			13)
Answer: C					
<ul> <li>14) What is the prim</li> <li>A) starch</li> <li>B) protein</li> <li>C) chlorophyll</li> <li>D) enzymes</li> <li>E) cellulose</li> <li>Answer: E</li> </ul>	ary structural cons	stituent in plant tiss	sues?		14)
15) What is somethin A) wood Answer: E	ng that you use aln B) metal	nost every day that C) gas	is a polymer? D) water	E) plastic	15)
<ul> <li>16) Energy is the</li> <li>A) motion that</li> <li>B) amount rem</li> <li>C) work that ha</li> <li>D) chemical boo</li> <li>E) capacity to c</li> <li>Answer: E</li> </ul>	16)				
17) The first law of t	17)				

A) entropy always decreases in normal chemical reactions

- B) energy is always degraded in a chemical reaction
- C) although energy can be transformed from one form to another, it cannot be created or destroyed in normal chemical reactions
- D) energy is always recycled in ecosystems
- E) all energy always has kinetic and potential characteristics

Answer: C

- 18) Most ocean ridges coincide with \_\_\_\_\_.
  - A) convergent plate boundaries
  - B) oceanic plates
  - C) divergent plate boundaries
  - D) transforming boundaries
  - E) continental plates

Answer: C

19) The energy of light is called electromagnetic radiation. In the electromagnetic spectrum, photosynthesis makes use of which specific wavelengths?

19) \_

A) infrared radiation

B) X-rays

C) the entire electromagnetic spectrum

D) visible light

E) ultraviolet radiation

Answer: D

20) Heat energy refers to the kinetic energy of molecules. Heat can move in a number of different 20) ways: when warm air rises causing the gas or liquid to circulate, the process that is said to occur is \_\_\_\_\_.

A) evaporation

B) conduction

C) latent heat transfer

D) convection

E) radiation

Answer: D

21) What are the three distinct layers of the earth?

A) mantle, crust, oceanic crust

B) mantle, magma, crust

C) core, mantle, crust

D) core, mantle, magma

E) oceanic crust, mantle, magma

Answer: C

22) What makes up about 70% of the Earth's total volume, as it relates to the Earth's structure?

A) lithosphere

B) magma

21)

C) mantle

D) oceanic crust

E) crust

Answer: C

23) What parts of the Earth's crust float on top of the mantle?

A) oceans

B) lithosphere

C) stratosphere

D) ozone layer

E) tectonic plates

Answer: E

23)

<ul> <li>24) The type of tectonic plate boundary at the Mid-Atlantic Ridge is referred to a A) transform fault</li> <li>B) seismic boundary</li> <li>C) convergent boundary</li> <li>D) divergent boundary</li> <li>E) subduction zone</li> <li>Answer: D</li> </ul>	as a 24)
<ul> <li>25) The Earth's atmosphere is mostly composed of</li> <li>A) nitrogen and oxygen</li> <li>B) oxygen and carbon dioxide</li> <li>C) water and carbon dioxide</li> <li>D) nitrogen and carbon dioxide</li> <li>E) water and oxygen</li> <li>Answer: A</li> </ul>	25)
<ul> <li>26) is the tendency toward a disordered state.</li> <li>A) Kinetic energy</li> <li>B) Entropy</li> <li>C) Convection</li> <li>D) Heat</li> <li>E) Potential energy</li> <li>Answer: B</li> </ul>	26)
<ul> <li>27) are synthesized in a two-step process: transcription and translation</li> <li>A) Genes</li> <li>B) Nucleic acids</li> <li>C) Carbohydrates</li> <li>D) Proteins</li> </ul>	n. 27)

E) Lipids

Answer: D

28) Starch and cellulose are examples of \_\_\_\_\_.

A) carbohydrates

B) lipids

C) nucleic acids

D) sterols

E) proteins

Answer: A

29) Light is a form of \_\_\_\_\_radiation.
A) gamma
B) infrared
C) X-ray
D) UV
E) electromagnetic
Answer: E

29)

- 30) The unit that measures the amount of energy required to raise the temperature of 1 g of water 30)
  1°C is the \_\_\_\_\_\_.
  A) watt-hour
  B) calorie
  C) volt
  D) joule
  E) kilowatt-hour
  - Answer: B
- 31) The type of ocean current that is driven by differences in temperature and salinity is a 31) \_\_\_\_\_
  - \_\_\_\_\_ circulation.
  - A) thermohaline
  - B) Hadley cell
  - C) Ferrel cell
  - D) gyre
  - E) Coriolis effect

Answer: A





- 32) When the vase is sitting on top of the table, what type of energy exists?
  - A) work
  - B) potential energy
  - C) kinetic energy
  - D) heat energy
  - E) entropy

## Answer: B

- 33) When the vase falls to the floor, what happens to the energy in the system?
  - A) The entropy within the system remains constant during the fall.
  - B) The kinetic energy is converted to heat energy that causes the vase to break.
  - C) The potential energy is converted into kinetic energy.
  - D) The kinetic energy is converted into potential energy.
  - E) The potential energy causes the entropy in the system to change causing disorder.

Answer: C

34) Which of the rays/waves along the wavelength contains the most energy?



33)



32)

- A) X-rays
  B) infrared rays
  C) microwaves
  D) ultraviolet rays
  E) gamma rays
  Answer: E
- 35) Use the energy conversions table to determine how many joules (J) a 60-Watt light bulb uses in 35) one hour.

	Joules (J)	Calories (c)	Watt-hours (Wh)
A joule (J) =	1	0.24	0.00028
A calorie (c) =	4.18	1	0.0012
A watt-hour (Wh) =	3,600	861	1

A) 72,000 J B) 144,000 J C) 294,000 J D) 216,000 J E) 252,000 J Answer: D 36) Where in the Earth's atmosphere are chemicals most likely to be dispersed and present for a long period of time?



C) thermosphere D) stratosphere E) ozone layer Answer: D

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

37) Match each term with the correct description.

37)

- I. Protons
- II. Neutrons
- III. Electrons
- IV. Isotopes

Answer: B

- V. Molecules
- A. Negatively charged particles of the central nucleus of an atom
- B. Electrically neutral particles of the central nucleus of an atom
- C. Positively charged particles of the central nucleus of an atom
- D. Two or more atoms held together by a chemical bond
- E. Atoms of an element with different numbers of neutrons

Answer: I. C, II. B, III. A, IV. E, V. D

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Read the accompanying scenario and answer the following questions.

The human body has the capacity to do work or engage in energy each day. Answer the following questions about the energy you have as you run a triathlon.

38) When you are resting at the top of a hill on a bicycle prior to racing down the hill you have energy for movement.

energy	IOI IIIOveilleilt.				
A) potential	B) nuclear	C) chemical	D) kinetic	E) mechanical	
Answer: A					
39) When the race be and complete the	egins and your body e race.	y starts to move, the	energy of	_ allows you to run	39)
A) work	B) motion	C) fusion	D) heat	E) fission	

ESSAY. Write your answer in the space provided or on a separate sheet of paper.

- 40) So far as we know, Earth is the only planet in our solar system that supports life. Describe/explain four major factors/characteristics unique to Earth, allowing for the evolution and support of life.
  - Answer: The presence of water is often cited as the first critical factor, as all life we are familiar with requires water to live. The presence of water in a liquid state, especially in Earth's vast oceans, plays a central role in maintaining temperatures that support life, as these large liquid reservoirs help to moderate any extreme temperature fluctuations. Water vapor in the atmosphere also influences the extent of evaporation and precipitation, allowing water to cycle across the planet's surface. A second critical factor is our unique distance from the sun (93 million miles). At this distance, the sun's energy and resulting temperature are not extreme, allowing organic compounds to form and life to flourish. A third critical factor was the evolution of photosynthetic organisms, which ultimately decreased the original concentrations of carbon dioxide and increased oxygen concentrations in the atmosphere, allowing a great diversity of life to evolve over the past 3.8 billion years. A fourth unique factor is the magnetic field arising from convection currents in the Earth's rotation. This magnetic field deflects the lethal ionizing radiation from solar winds, to which other planets in our solar system are regularly subjected.
- 41) Describe how heat moves as you boil a pot of water to cook spaghetti for dinner.
  - Answer: Heat moves in four ways, conduction, convection, radiation, and latent. When water is boiling the source of conduction is the gas or electricity on the stove, it provides the heat that will help to allow the molecules of water to boil. Convection happens as the warm regions in the water become less dense and begin to rise, causing the boiling to begin. Radiation releases electromagnetic energy that is felt from the heat source and latent heat transfer occurs as the water evaporates as it boils, giving of steam that we might see.

This sample only, Download all chapters at: AlibabaDownload.com