

Cells and Systems

Unit 2 Test

* Key *

Student Name _____

Class _____

- Characteristics of living organisms include all of the following, EXCEPT ...
 - they need energy and produce wastes
 - they reproduce and grow
 - they respond to their environment and adapt
 - they grow and move freely in their environment
- The basic unit of every system is a ...
 - nucleus
 - cell
 - tissue
 - organ
- The stomach is a major organ of the digestive system. The specialized tissue that enables this organ to perform its function, to break down food, is ...
 - blood tissue
 - nerve tissue
 - muscle tissue
 - digestive tissue
- Plants use their shoot system to make food for the plant. The stem is the organ of the plant that gives it support. The specialized cells in the stem are able to provide support because they have ...
 - thick walls
 - a large nucleus
 - very little water
 - chlorophyll
- The Pika was described in the text as an example of a multi-cellular organism that is able to survive because of the habits and the environment of the organism, which direct the way that cells are organized. The special baglike chamber, where chewed and semi-digested food collects, enable these, to help break down the food. They are ...
 - specialized tissues
 - tiny bacteria
 - very strong chemicals
 - muscle cells

6. Anton van Leeuwenhoek was the first person to see tiny organisms, made up of only one cell, using a very simple microscope. His occupation, at the time that he discovered these tiny cells, was a ...

- A. lens grinder
- B. doctor
- C. linen merchant
- D. lenscrafter

7. The Scientist, who originally named these tiny cells, which reminded him of honeycombs, was ...

- A. Anton van Leeuwenhoek
- B. Robert Hooke
- C. Matthias Schleiden
- D. Theodore Schwann

8. The cell theory was based on these two points. All living things ...

- A. have many cells and these cells are always in motion
- B. have many cells and they are too small to see
- C. are made up of one or more cells and they are the basic units of structure and function
- D. are able to reproduce and have many cells with specialized functions

9. Two Canadians developed the first practical electron microscope. To test this very valuable laboratory instrument, they first looked at a ...

- A. cork
- B. razor blade
- C. copper wire
- D. drop of pond water

10. To calculate the Field of View, you first need to ...

- A. determine the diameter of the field of view for the low power lens
- B. calculate the magnification power of the lens you are using
- C. count the number of cells in the low power field of view
- D. multiply the magnification by the number of cells in the field

11. Many single-celled (unicellular) organisms have different ways of moving, obtaining food and carrying out other essential functions for living. Structures, that unicellular organisms, such as a euglena, or a chlamydomonas have for movement are called ...

- A. flagella
- B. cytoplasm
- C. stentor
- D. diatoms

12. In the sample of pond water you may have studied, the amoeba moves by changing its shape. It pushes its cytoplasm against one part of its cell membrane, causing a bulge. This bulge is called a ...

- A. pseudomym
- B. pseudoplasm
- C. false front
- D. false foot

13. A typical plant cell viewed under a compound light microscope reveals the many different parts that have different functions. The part of the cell which surrounds and protects the contents of the cell is called the ...

- A. nucleus
- B. cytoplasm
- C. cell membrane
- D. vacuole

14. The chloroplasts of a plant cell have a very specialized function. They are the structures where ...

- A. food is transported to other parts of the cell
- B. photosynthesis takes place
- C. food is stored by the cell until it is needed
- D. energy for reproduction is released

15. Cells are various sizes and shapes. They are normally measured in units called ...

- A. nanometers
- B. micrometer
- C. minimeters
- D. macrometer

16. Certain materials are allowed to pass through it and others are prevented from passing through. The type of cell membrane that is present in a plant and animal cell is called a ...

- A. selectively impermeable membrane
- B. selectively permeable membrane
- C. permeable membrane
- D. impermeable membrane

17. A process which enables substances to spread out, throughout a solution, eventually becoming evenly distributed in the solution, is called ...

- A. distillation
- B. dissolving
- C. desalination
- D. diffusion

omit

18. Whenever nutrients are moved in and out of cells, the process takes place through the cell membrane. This process occurs because of different ...
- A. types of nutrients present
 - B. concentrations present
 - C. types of membranes
 - D. sizes of openings in the membrane
19. Osmosis is the diffusion of water through a selectively permeable membrane. This process occurs because water will move from an area of ...
- A. low concentration to high concentration
 - B. high concentration to low concentration
 - C. low concentration to low concentration
 - D. high concentration to high concentration
20. The transportation of nutrients in plants is the role of the plant's tissue. Specialized tissue connects the roots to the leaves. The Phloem tissue transports ...
- A. water from the leaves to the air in a process called transpiration
 - B. water from the roots to the leaves
 - C. sugars, manufactured in the leaves to the rest of the plant
 - D. energy to the vacuole to utilize the food stored there
21. Specialized cells are specialized for particular tasks. These types of cells are specialized to provide structure and support. They are called ...
- A. nerve cells
 - B. muscle cells
 - C. blood cells
 - D. bone cells
22. There are many advantages to being a multi-cellular organism. The following are examples of some of these advantages, EXCEPT for one, which is that they ...
- A. have a specialized environment
 - B. can grow to be very large
 - C. can obtain food from many sources
 - D. have complex bodies
23. The organization of cells follows this pattern -
- A. cells form organs, tissues, and systems
 - B. cells form tissues, organs, and systems
 - C. cells form systems, organs, and tissues
 - D. cells form organs, systems, and tissues
24. The stomach is an organ which is made up of different tissues. The connective tissue, in the stomach, is the specialized tissue that enables the stomach to ...
- A. hold its shape
 - B. move the contents around
 - C. line the walls of the stomach
 - D. co-ordinate all of the stomach's activities

Omit

Omit

Omit

Omit

omit

25. Organs work together to make a system or network that performs a specialized function. Plants have only two main systems. They are the ...
- A. stems and the leaves
 - B. roots and the leaves
 - C. shoot and the roots
 - D. leaves and the shoot
26. This organ system carries nutrients throughout the body, so that specialized cells can perform specialized functions. This body system is the ...
- A. digestive system
 - B. integumentary system
 - C. circulatory system
 - D. respiratory system
27. Each body system works with other body systems to perform its function effectively. When different gases are exchanged in the lungs and then transported throughout the body, the systems working together are the ...
- A. respiratory and integumentary
 - B. respiratory and digestive
 - C. respiratory and circulatory
 - D. respiratory and sensory
28. The excretory system is connected to other systems, such as the circulatory system and the digestive system. The excretory system's primary function is to ...
- A. get rid of wastes
 - B. get nutrients to the cells
 - C. exchange gases
 - D. to protect the other systems
29. Sensory awareness is important for all living things, so they can respond and adapt to their environment. When your muscles 'quiver' because you are cold, they generate ...
- A. wastes
 - B. heat
 - C. blood flow
 - D. a nutrient imbalance
30. A knee-jerk reaction is a simple example of a feedback system that is controlled by the nervous system in the body. A sharp tap of the reflex hammer to the knee sends a signal, up the spinal cord, to the brain, where the brain interprets and then sends a message to the leg to react. The stimulus in this example is the ...
- A. reflex hammer
 - B. brain
 - C. spinal cord
 - D. leg

31. Blood is the body's transportation system. The blood is composed of different types of cells which have a very specialized function. The type of blood cells that comprise less than 1% of the blood's volume and defends the body against infection and disease are the ...
- A. red blood cells
 - B. white blood cells
 - C. plasma cells
 - D. platelets
32. Disorders of the circulatory system are the leading cause of death in North America. One of the most common is hypertension, which is ...
- A. damage to the heart tissue
 - B. heart attacks or strokes
 - C. high blood pressure
 - D. waste remaining in the blood
- over* 33. The digestive system can also malfunction, causing severe repercussions for an individual and even death. These disorders are caused by poor lifestyle habits or disease. One such disorder may lead to colon cancer. It is caused by ...
- A. over exertion
 - B. low fiber diet
 - C. high fiber diet
 - D. excessive use of aspirin
34. The respiratory system can also malfunction due to poor lifestyle choices. When the cilia (which remove airborne particles when they beat continuously) are clogged by mucus they cannot perform their function properly and over time, can become inflamed. This condition (which can be treated) is called ...
- A. bronchitis
 - B. ciliaitis
 - C. emphasya
 - D. lung cancer
35. Your body needs to have the right conditions under which it can perform its functions properly. To maintain healthy organs and systems, the essential needs are ...
- A. clean air, water, nutritious food, exercise and sleep
 - B. dairy products, fruits and vegetables, meat and grains
 - C. oxygen, minerals, vitamins, relaxation and medicine
 - D. fats, sugars, carbohydrates, proteins and salt

The last part of this Test is to be completed in this booklet.

The diagrams, which follow, are to be labeled, as directed.

Topic 1 - What is Light?


1. Radiation is the type of energy transfer which does not require ...
- A matter
 - B heat
 - C waves
 - D light
2. Light-producing technologies, such as incandescent and florescent lights, are examples of ...
- A bioluminescence
 - B natural light source
 - C artificial light source
 - D chemical luminescence
3. The absorption of radiant energy, on a dark surface, depends on the light's ...
- A form
 - B intensity
 - C direction
 - D temperature
4. Ultraviolet light energy is absorbed by chemical particles giving visible light energy. This transformation describes ...
- A incandescence
 - B phosphorescence
 - C bioluminescence
 - D florescence
5. Why is the disposal of florescent light tubes a challenge?
- A because they could cut someone, if they were broken
 - B because the materials they are made of are not biodegradable
 - C because the materials they are made of are toxic (mercury)
 - D because they cannot be recycled

Topic 2 - Reflection

6. Reflection is the process in which light strikes a surface and bounces off that surface. The reflected ray will bounce back directly to the light source if it is lined up with the ...
- A incident ray
 - B reflected ray
 - C normal line
 - D reflecting surface

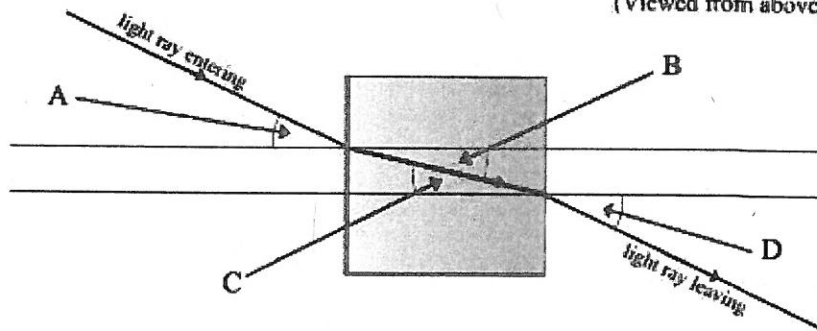
7. To discover the laws of reflection it is necessary to use a ...
- A ray box
 - B plane mirror
 - C reflecting surface
 - D normal line
8. In stating the law of reflection, that *the angle of incidence equals the angle of reflection* it is necessary to understand that this is a law because ...
- A a scientist has stated it
 - B this relationship happens most of the time
 - C this relationship always happens
 - D science is always accurate and precise
9. When you attempt to focus an image on a screen, using a concave mirror, but cannot, yet, you can see an image when are looking into the same concave mirror, the image is called a ...
- A convex distortion
 - B concave image
 - C virtual image
 - D reflected distortion
10. Pool players use the law of reflection to improve their game. When the cue ball bounces off the cushion on the side and hits the target ball, the action is called a ...
- A bank shot
 - B cushion shot
 - C angled shot
 - D image shot

Topic 3 - Refraction

11. Refraction is the bending of light when it travels from one medium to another. What direction does the light bend when it travels from a medium of greater density to one of lesser density?
- A along the normal
 - B along the perpendicular
 - C towards the normal
 - D away from the normal
- 
12. When light is refracted, the angle of incidence increases and the angle of refraction ...
- A depends on the intensity of the light
 - B increases, depending on the material
 - C decreases, but only by one half
 - D increases by double

13. Mirages cause an illusion of a watery surface. This illusion is actually ...
 A water drops reflecting the light
 B water drops refracting the light
 C the sky refracted by warm air
 D the sky reflected by warm air
14. When light strikes a surface and is absorbed, the light ...
 A changes into another form of energy
 B bounces off in many different directions
 C travels through it in a different direction
 D happens only when it is a smooth shiny surface
15. During refraction, when the angle of incidence is doubled, the angle of refraction is ...
 A also doubled
 B not necessarily doubled (increased...)
 C decreased by the same amount
 D decreased by about half

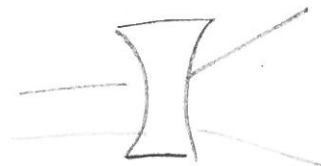
16. Label the angles produced when a light ray goes through a refraction tank.
 (Viewed from above)



- A is the angle of incidence
- B is the angle of refraction
- C is the angle of incidence
- D is the angle of refraction.

Topic 4 - Lenses and Vision

17. When light passing through a lens, the light is bent, causing the rays of light to diverge.
 The type of lens is a ...
 A convex lens
 B concave lens
 C optic lens
 D diamond prism lens

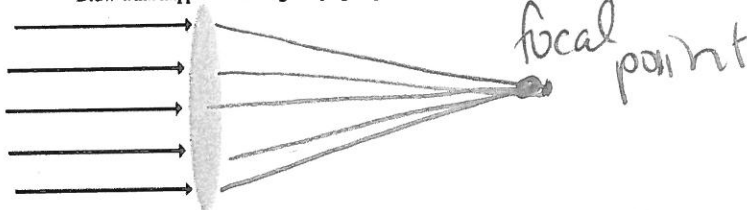


18. When light rays pass through a convex lens the image that is formed is ...
- A diverted
 - B converted
 - C inverted
 - D implied
19. The lens of the human eye is a convex lens. That means that when it takes in light from an object, it refracts the light rays, by focusing them on the retina. If the eye is too long, the image will form in front of the retina. This condition is called ...
- A retina dysfunction
 - B optical illusion
 - C near-sightedness
 - D far-sightedness
20. When comparing the eye and the camera, certain parts perform the same function. The retina of the eye is similar to the part of the camera called the ...
- A film
 - B shutter
 - C diaphragm
 - D focusing ring
21. The aperture of a camera controls the amount of light coming into the camera, so that a clear image can be formed. This aperture-opening device is similar to the pupil of the eye. It is called the ...
- A iris
 - B shutter
 - C diaphragm
 - D optic nerve

22. When light passes through a lens it is refracted. Complete the following illustration and sentences as directed.

Activity 1 (3 points)

Draw what happens to the light rays going through this lens.

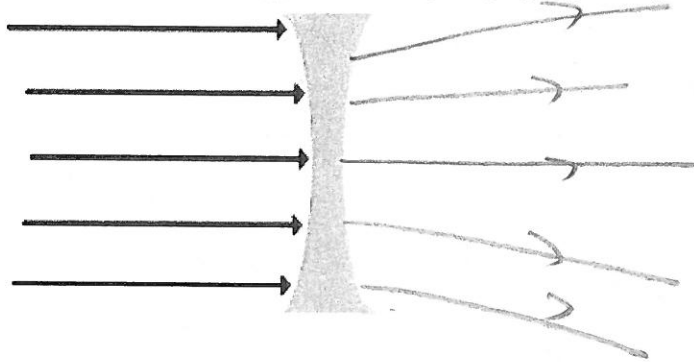


What type of lens is it? It is a convex lens.

What happens to the light rays? They are converging.

Activity 2 (3 Points)

Draw what happens to the light rays going through this lens.



What type of lens is it? It is a Concave lens.

What happens to the light rays? They are diverging

Topic 5 - Extending Human Vision

23. Telescopes use different types of mirrors to collect the rays of light. The type of telescope that uses a concave mirror to collect the rays of light from distant objects is the ...
- A reflecting telescope
 B refracting telescope
 C prism telescope
 D magnifying telescope
24. Magnifying glasses are used to make object look bigger than they usually are. New developments and discoveries have been able to make magnifying instruments (known as microscopes) much stronger. When Anton van Leeuwenhoek was able to see bacteria, for the first time, the magnification he needed was about ...
- A 200X
 B 280X
 C 1800X
 D 2000X
25. In order to have the greatest magnification possible in a reflecting telescope, it is necessary to have a ...
- A very large concave mirror
 B very thick objective lens
 C very strong plane mirror
 D great distance between the object and the image

omit

omit

- Omit
26. A binocular uses prisms to redirect light from distant objects. These prisms act like ...
- A concave lenses
 - B convex lenses
 - C plane mirrors
 - D refracting mirrors
27. Microscopes have limits in terms of their magnification because of the types of lenses that are used. To magnify objects by different amounts, scientists would use this part of the compound microscope.
- A objective lens
 - B eyepiece lens
 - C condenser lens
 - D adjustment lens

Topic 6 – The Source of Colors

28. White light - when passed through a prism - will be broken up into all the visible colors of the spectrum. What will happen if all these colors are then passed through a second prism?
- A nothing
 - B no light can be seen
 - C white light will reform
 - D the colors of the spectrum will reverse
29. Sunlight produces the seven colors of the spectrum in a pattern called the solar spectrum. To remember the pattern this memory aid is used ...
- A RYOBGIV
 - B ROYGBIV
 - C VIBOGRY
 - D GROVIBY
30. When the primary colors of light - red, green, and blue - are added together, this color is produced.
- A yellow
 - B magenta
 - C cyan
 - D white
31. Rods and cones are two types of light detecting nerve cells in the retina of the eye. Which of the following statements is correct?
- A Rods are cylindrical and detect color
 - B Cones are shaped like teardrops and detect color
 - C Rods are shaped like teardrops and detect the presence of light
 - D Cones are cylindrical and detect the presence of light

32. The condition in some people's eyes that is responsible for color blindness is if ...
- A Cones cannot detect light
 - B Rods detect only some colors
 - C Cones detect only some colors
 - D Rods cannot detect light

Topic 7 - The Wave Model of Light

33. Wavelengths can be determined by measuring ...
- A the height of a crest
 - B the depth of a trough
 - C the distance between two crests
 - D the difference in height between a crest and a trough
34. The rate at which an object is moving up to the top of a crest and down to the bottom of a trough is called ...
- A amplitude
 - B frequency
 - C hertz
 - D rest position
35. When light passes through a small opening, the waves spread out. How far they spread out depends on this ...
- A amplitude
 - B frequency
 - C wavelength
 - D one complete trough
36. At sunset, the colors we are able to see are reds and oranges. This is made possible because when light hits the atmosphere, this happens.
- A blue and violet are absorbed by dust particles
 - B red and violet are refracted through the atmosphere
 - C blue and orange are reflected back into space
 - D red and orange pass around the particles
37. A laser demonstrates the difference between incoherent light and coherent light. The laser, which is used for many purposes gives off coherent light, which are ...
- A waves with multiple frequencies
 - B waves with only one frequency
 - C waves with variable wavelengths
 - D waves with a variable amplitude

Topic 8 - Beyond Light

38. The different between water waves and light waves is that these vibrate ...
- A the different colors of light
 - B electrical and magnetic fields
 - C wavelengths and frequencies
 - D particles in the magnetic spectrum
39. The frequency of different colors of light waves is often given in scientific notation. The frequency of orange light is 500,000,000,000,000 Hz. This is can be represented, using scientific notation, as ...
- A 5.0×10^{14}
 - B 5.0×10^{13}
 - C 500.0×10^{12}
 - D 5000.0×10^{11}
40. Infrared radiation is heat radiation. This type of radiation can have a useful application. They are used in ...
- A computers to keep the chips warm
 - B restaurants to keep food warm
 - C refrigerators to trap the heat
 - D microwaves to cook the food
41. There are many different types of radio waves. A transmitting station can send these types of signals to an orbiting satellite, which will amplify them and send them back to a receiving station on the Earth. The type of signal used in satellite communications is ...
- A AM Radio
 - B FM Radio
 - C Microwave
 - D Shortwave
42. A special blocking agent - **sunscreen** - is added to the lotion we use to avoid sunburn. This blocking agent reflects the UV rays and can help prevent cancerous growths on the skin. The strength of this blocking agent is determined by the ...
- A SDF
 - B SPF
 - C SVF
 - D SBF

Student Name _____ Class _____

1.



This symbol means ...

- A. toxic
- B. reactive
- C. corrosive
- D. poisonous

Omit.

2.



This symbol means ...

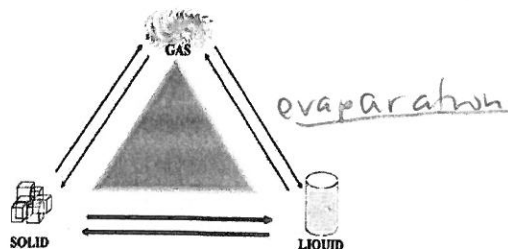
- A. toxic
- B. reactive
- C. corrosive
- D. poisonous

3. The particle model helps us to understand about the state of a substance by the number of particles that appear to be moving and the relative spaces between the particles. A liquid substance would be represented most likely by model ...



4. When a substance undergoes a change of state it can use energy or give off energy. The change that occurs when a substance changes **from a liquid to a gas** is referred to as ...

- A. deposition
- B. sublimation
- C. vaporization (evaporation)
- D. condensation



5. Brass is a solution that is best classified as ...

- A. element
- B. solution
- C. compound
- D. mechanical

Omit

6. A **colloid** is a heterogeneous mixture that is composed of fine particles evenly distributed throughout another substance. An example of a colloid is ...

- A. milk
- B. mayonnaise
- C. flour in water
- D. hair gel

Omit

7. Properties are characteristics that can be used to describe how a substance behaves. Ductility is a property that describes a substance's ...

- A. mixing ability
- B. reaction with water
- C. ability to stretch
- D. toxic effect

8. The only list below that describes only chemical properties of a substance is ...

- A. reactivity, toxicity, stability, malleability
- B. ductility, crystal shape, miscibility, solubility
- C. malleability, smell, viscosity, miscibility
- D. density, conductivity, combustibility, color

9. Physical or chemical change can be identified by evidence. When a substance undergoes a physical change the evidence used includes all of the following, **EXCEPT** ...

- A. colour
- B. odour
- C. toxicity
- D. density

10. One of the procedures used today - credited to alchemists (part pharmacist and part mystic) - is a procedure used to separate mixtures, called ...

omit

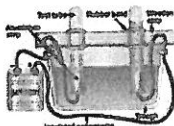
A. dissolving
 B. distillation
 C. desalination
 D. disintegration

11. Lavoisier was one of the first chemists to use a balanced view of chemical change, which we now call the Law of ...

omit

A. Conservation of Mass
 B. Definite Composition
 C. Multiple Proportions
 D. Combustion

- 12.



Using electricity to split molecules into their elements is a process called ...

omit


A. electrolysis
 B. electricity
 C. electroplating
 D. electrorefining

13. John Dalton developed a theory that helped explain what happened in the electrolysis of water and was a new way to explain chemical facts and laws. His theory was called the ...

A. Quantum Theory
 B. Atomic Theory
 C. Raisin Bun Theory
 D. Plum Pudding Theory

14. In science, these do not explain anything. They simply describe and summarize what happens.

A. models
 B. theories
 C. ideas
 D. laws

15.  Early chemists used the planets to identify the elements known to them. This later was a problem, when more elements were discovered, because they ran out of planets.

This symbol represent the planet and element ...

omit

A. Mars - iron
 B. Venus - copper
 C. Mercury - mercury
 D. Jupiter - tin

16. These elements have both metal and non-metal properties. Some of them are semi-conductors, which means, they can carry an electrical charge under special conditions. Making them great for computers and calculators. They are the ...

A. Transition Metals
 B. Rare Earth Elements
 C. Metalloids
 D. Other Metals

17. The 6 elements in this group all have the maximum number of electrons possible in their outer shell which makes them stable. They are known as the ...

A. Halogens
 B. Alkali Metals
 C. Noble Gases
 D. Alkaline Earth Metals

18. Mendeleev arranged the element cards into a 'solitaire-like' table. He played with them, by sorting and arranging the elements in many different combinations. He was able to identify gaps where elements, would be able to fit, that were ...
- A. known to exist
 - B. not yet discovered
 - C. rare earth elements
 - D. identified by alchemists
19. In 1915 the Modern Periodic Table was reorganized, including more information about each element with a focus on ...
- A. atomic structure
 - B. Chemical properties
 - C. Physical properties
 - D. reactivity rating
20. Vertical columns form a **group** of elements (*numbered 1-18*) The horizontal rows (*numbered 1-7*) are called ...
- A. lists
 - B. types
 - C. family
 - D. periods
21. In the periodic table the following elements would be identified as the Noble Gases.
- A. Be, Mg, Ca, Sr, Ba, Ra
 - B. Li, Na, K, Rb, Cs, Fr
 - C. He, Ne, Ar, Kr, Xe, Rn
 - D. Rf, Db, Sg, Bh, Hs, Mt, Uun
22. As you move across the periodic table the properties of the elements change. The most reactive metals include ...
- A. sodium and lithium
 - B. iron and copper
 - C. aluminum and carbon
 - D. lead and zinc
23. When any of the 112 elements combine into groups of 2 or more they form compounds. If atoms of elements are shared, this type of compound is formed.
- A. ionic
 - B. atomic
 - C. aqueous
 - D. molecular
24. Guyton de Morveau in France developed a standardized chemical naming system in 1787 to determine a chemical name. The type of element that is always first is the ...
- A. acid
 - B. base
 - C. metal
 - D. Non-metal
25. The only compound that contains three elements is ...
- A. $H_2O_{(l)}$ Water
 - B. $C_6H_{12}O_{6(s)}$ Glucose
 - C. $CO_{2(g)}$ Carbon dioxide
 - D. $NO_{2(g)}$ Nitrogen dioxide
26. In molecular pure substances the bonding between atoms is strong, but the attraction between the molecules is weak. They are good insulators, poor conductors and have a distinct crystal shape. This type of molecular compound is produced when ...
- A. metals combine
 - B. non-metals combine
 - C. gases and solids combine
 - D. non-metals and metals combine
- omit
omit
omit
omit
- not Science 8

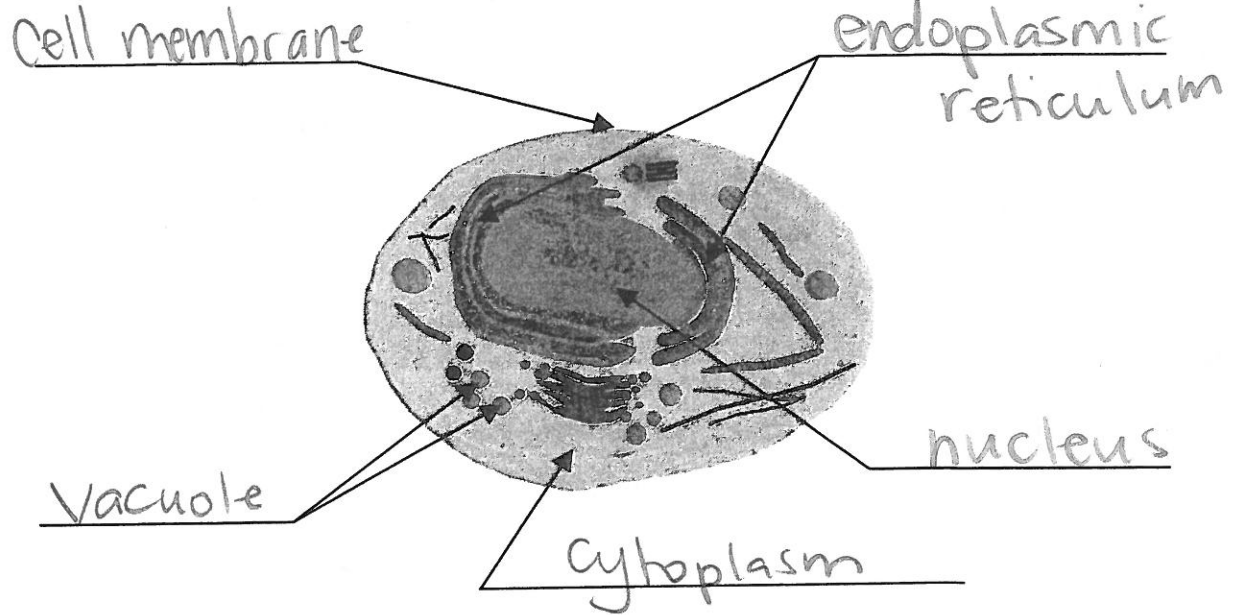
* Geology Unit *

- omit
15. The same field trip included a stop at the 'Big Rock' in Okotoks. A receding glacier left behind this rock, which is called ...
- A. an abrasion
 - B. a moraine
 - C. a striation
 - D. an erratic
16. Compared to the other layers of the Earth, the crust is ...
- A. thicker than the upper mantle
 - B. thicker than any other layer
 - C. thicker than the lower mantle
 - D. thinner than all the layers
17. Alfred Wegner's Theory of Continental Drift determined that the continents at one time all fit together to form one large super continent, called Pangaea. His evidence was their interlocking shapes and ...
- A. discovery of land bridges connecting the continents
 - B. different trees on different continents
 - C. lower ocean level with islands close together
 - D. similar fossil remains found on different continents
- omit ?
18. Wegener proved that glaciers once existed in the southern hemisphere. His evidence were the ...
- A. moraines found
 - B. erratics found
 - C. ice caves
 - D. bedrock abrasions
19. Advances in technology, like the magnetometer, led scientists to develop the theory of sea-floor spreading because of the....
- A. behavioural patterns of whales
 - B. radar and sonar waves
 - C. magnetic variations at the surface
 - D. magnet reversals on the ocean floor
20. When scientists discovered the ridges along the ocean floor, they also found lava coming out of the cracks. This type of lava is called ...
- A. sea-floor lava
 - B. ocean lava
 - C. saltwater lava
 - D. pillow lava
21. The San Diego Zoo is able to get early warnings of possible earthquakes because ...
- A. they have the best seismic equipment
 - B. they are directly over the most active fault
 - C. scientists believe this area will be hit first
 - D. animals can sense the start of an earthquake

22. Seismologists use a special machine that measures earthquakes. The fastest of all three types of seismic waves are the p waves. They are called ...
- A. principal waves
 - B. pretty waves
 - C. pin waves
 - D. primary waves
23. An earthquake in Japan registers on a seismograph in Winnipeg, Manitoba. This occurs because ...
- A. seismographs anywhere will record all earthquakes
 - B. the earth's crust is solid, allowing the surface waves to be recorded anywhere
 - C. the inner core of the earth is liquid
 - D. the outer core of the earth is liquid
24. The source of an earthquake can be determined by recording the interval time between the p waves and s waves. Where the earthquake starts from is called the ...
- A. foci
 - B. focus
 - C. shadow zone
 - D. epicentre
25. The pressure under the earth's crust can cause the plates to move in different ways. A fault that causes plates to move sideways is called a ...
- A. transform fault
 - B. reverse fault
 - C. normal fault
 - D. strike-slip fault
26. Volcanoes erupt when they become active. Until an eruption occurs, volcanoes are described as ...
- A. stagnant
 - B. extinct
 - C. plugged
 - D. dormant
27. There are a number of volcanoes that border the pacific ocean and are known as ...
- A. Hell's Kitchen
 - B. Circle of Fire and Ice
 - C. Rapid Change Zone
 - D. Ring of Fire
28. An earthquake or an erupting sea-floor volcano can cause a 'Tsunami'. In *Japanese* it means ...
- A. lava flow
 - B. ash plume
 - C. shaking ground
 - D. high wave

36 - 40 (5 Marks)

Label the parts of the **Animal Cell**



41 - 45 (5 Marks)

Label the parts of the **Microscope**

