

( 8<sup>th</sup> ) Study guide General science final Test

Name \_\_\_\_\_

**1--Circle the letter of the answer that correctly completes each statement.**

1. A \_\_\_\_\_ is formed when two or more elements join together  
. a. mixture b. compound c. reaction
2. Temperature and humidity are the same throughout a(n) \_\_\_\_\_. a. ozone layer  
b. front c. air mass
3. Mold and mushrooms are examples of \_\_\_\_\_.  
a. fungi b. protists c. monerans
4. A \_\_\_\_\_ shows the feeding order of organisms in an ecosystem.  
a. succession b. food chain c. pyramid of numbers
5. Sound is produced when matter \_\_\_\_\_.  
a. rotates b. dissolves c. vibrates
6. The central part of an atom is called the \_\_\_\_\_.  
a. proton b. neutron c. nucleus
7. Magma that cools and hardens forms \_\_\_\_\_ rock.  
a. igneous b. sedimentary c. metamorphic
8. The \_\_\_\_\_ is the continuous movement of water between the atmosphere  
and Earth's surface.  
a. water table b. water cycle c. groundwater
9. The joining of an egg cell and a sperm cell is called \_\_\_\_\_.  
a. ovulation b. fertilization c. reproduction
10. Gravity is the force of attraction between any two objects that have  
\_\_\_\_\_.  
a. mass b. force c. volume

**2-Match each property in Column A with its correct measurement unit in Column B. Write the letter of the answer on the line.**

**Column A**

- \_\_\_\_\_ 1. volume of a liquid
- \_\_\_\_\_ 2. force
- \_\_\_\_\_ 3. area
- \_\_\_\_\_ 4. speed
- \_\_\_\_\_ 5. work
- \_\_\_\_\_ 6. temperature
- \_\_\_\_\_ 7. volume of a solid
- \_\_\_\_\_ 8. electromotive force
- \_\_\_\_\_ 9. length
- \_\_\_\_\_ 10. Mass

**Column B**

- a. meter
- b. degree
- c. volt
- d. newton
- e. gram
- f. cubic meter
- g. square meter
- h. liter
- i. kilometers per hour
- j. joule

**Part D** Write the answer to each problem.

1. What is the volume of a box that measures 15 cm long, 20 cm wide, and 25 cm high?

2. How far can a car travel in  $4\frac{1}{2}$  hours if its average speed is 90 kilometers per hour?

3. A woman pushed a crate 15 meters using a force of 22 newtons. How much work did she do?

4. What is the difference between an element and a compound?

5 Name the three main types of rocks and describe how each type is formed.

6. What is the difference between an area's weather and its climate?

7. List eight forms of energy (6)

**Part E.**

**In the space below, draw a diagram showing the parts of an atom.  
Label each part with its name.**

3. Complete the diagram below to show the sequence of feeding relationships in a food chain.

Use the terms herbivore, carnivore, and producer in the first line of the diagram.  
Then tell which order of consumer each organism is.

\_\_\_\_\_ → \_\_\_\_\_ → \_\_\_\_\_  
( \_\_\_\_\_ -order consumer) ( \_\_\_\_\_ -order consumer) ( \_\_\_\_\_ -order consumer)

**Part F Write a short answer for each question.**

1. Why is less food energy available at each higher level of a food chain

**Part F**

**Follow the directions for each item below. 1. In the space below, draw a simple diagram showing the water cycle. Include labels that name and describe each step**

2. \_\_\_\_\_ is anything that has mass and takes up space.
3. In a \_\_\_\_\_ circuit, electric current flows through a single pathway.
4. A group of similar cells that work together are called a(n) \_\_\_\_\_.
5. A synapse is a tiny gap between \_\_\_\_\_.
6. Seasons are caused by the tilt of Earth's \_\_\_\_\_.
7. Organisms are classified into five \_\_\_\_\_.
8. Photons are small bundles of energy that make up \_\_\_\_\_.
9. Molds and casts are two forms of \_\_\_\_\_.
10. The water cycle is powered by the \_\_\_\_\_.

**Part G**

**1. Body parts that are similar in related organisms are called \_\_\_\_\_ structures.**

**a. evolution b. vestigial c. homologous**

**2. \_\_\_\_\_ tissue carries materials throughout a plant.**

**a. Vascular b. Stem c. Rhizoid**

**3. The line of 0° longitude is the \_\_\_\_\_.**

**a. equator b. axis c. prime meridian**

4. \_\_\_\_\_ is the ability to do work.

a. Effort b. Energy c. Force

5. The property that is least helpful in identifying a mineral is \_\_\_\_\_.

a. hardness b. luster c. color

**Part B Read each sentence. Write T if the statement is true or F if it is false.**

\_\_\_\_\_ 1. A rock is a natural solid material made of one or more minerals.

\_\_\_\_\_ 2. Work is what happens when a force makes something move.

\_\_\_\_\_ 3. The smallest particle of each kind of matter is a molecule.

\_\_\_\_\_ 4. Photosynthesis takes place in a plant's chloroplasts.

\_\_\_\_\_ 5. Sound waves are visible.

\_\_\_\_\_ 6. A single point on Earth's surface can be found at intersecting lines of latitude and longitude.

\_\_\_\_\_ 7. Mass is anything that has weight and takes up space.

\_\_\_\_\_ 8. The atmosphere is the layer of gases that surrounds Earth.

\_\_\_\_\_ 9. Asexual reproduction involves two parents.

\_\_\_\_\_ 10. Earth's axis is an imaginary line joining the hemispheres