

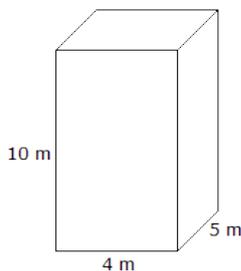
Name: _____ Grade 5 _____

I. Read & understand each statement. Write T if the statement is correct and provide the correct word on the space, if the statement is incorrect.

- _____ 1. **Compound** is in the nucleus of an atom and has a positive charge.
- _____ 2. **Atom** is in the nucleus of an atom and has no electrical charge.
- _____ 3. **Dilute** is a part of an atom and has a negative electrical charge.
- _____ 4. A solution is **concentrated** if it has so much solute that is relatively close to being *saturated*.
- _____ 5. **Chemists** identified the substances in foods that prevented diseases called *vitamins*.
- _____ 6. When a rubber and **sulfur** are heated together, rubber shoes and tires last for a longer use.
- _____ 7. There are more than 100 types of matter, each called **proton**.
- _____ 8. The smallest particle of an element is **saturated**.
- _____ 9. Atoms combine to form **compounds**.
- _____ 10. **Rust** is the combination of iron and oxygen.

II. Read the questions and write the correct answer on the space provided for.

1. To calculate volume, what is the formula? _____
2. Look at the diagram below and find what is its volume.



V = _____

3. Find out the volume of a box with the dimensions 4 m × 5 m × 6 m.

V = _____

4. To calculate Density, what is the formula? _____

5. It is the amount of matter in an object. What is it? _____

6. Weight changes when the pull of gravity changes. Gravity is not the same everywhere on Earth. Do you agree or disagree? _____

7. Complete the table below by finding the density. Remember the formula in order to calculate it.

Mass	25 g	50 g	10 g	32 g
Volume	5 cm ³	10 cm ³	5 cm ³	4 cm ³
Density				

8. It is said that there are more than 3/4 of the elements are metals than non-metals. What does it mean then? Write your answer.

9. Write three examples of elements that you know.

10. Being shiny, bendable, and able to conduct heat and electricity are the physical properties of Metals. Do you agree or disagree? _____

11. How do two magnets push away and attract each other?

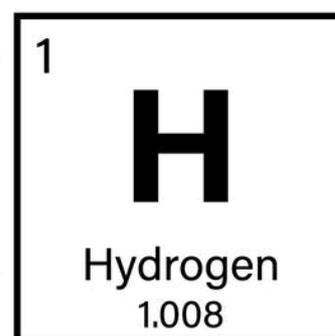
12. Look at the Describe Periodic Table. Tell how it is organized.



13. Look at the diagram and answer the question.

What is the atomic number of the element shown?

What is the atomic mass of the element shown?



14. How many elements are in a molecule of H_2O ? _____

15. They are formed by salts in a regular geometric pattern. _____

16. In a mixture, different materials are placed together but do not bond to form compounds.

Do you Agree or Disagree? _____

17. Name 5 metals that are pure elements and 3 that are mixtures.

18. I am known as a universal solvent. I dissolve solute. Who am I? _____

19. It is a special mixture in which substances are spread out evenly. What is it?

20. What is used to separate the iron filings from sand?

21. How many different elements do we in this chemical formula CO_2 ?

22. I accidentally discovered a cure for infection by way of antibiotics. Who am I?

23. Write an example of a potassium rich fruit. _____

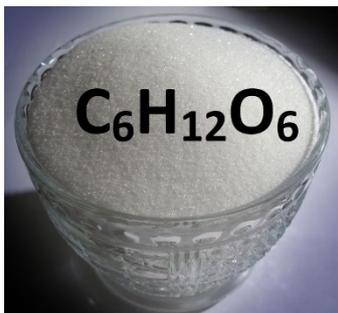
24. _____ is done when a force moves an object.

25. Rubbing two materials against each other can cause _____.

III. Match the description of each kind of motion from column A to column B.

- | | |
|---|-----------------------|
| 1. Earth moves around the sun. | a. periodic motion |
| 2. Cars, trucks and buses move in many Directions & speeds. | b. constant motion |
| 3. A pendulum swings back & forth. | c. variable motion |
| 4. Wheels | d. circular motion |
| 5. Rubber bands when pluck has this motion. | e. vibrational motion |

IV. Observe the diagram below and write what compound is meant by the chemical formula.



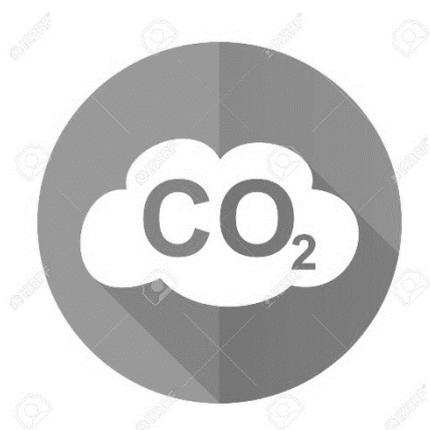
1. _____



2. _____



3. _____



4. _____

V. Read the questions and answer by circling the letter of your choice.

- When a _____ happens, the material remains the same. Its changes are changes in position, size, shape, volume and phase of matter. There's no new substance or another matter is formed.
 - Physical Change
 - Chemical Change
 - Compound
 - Mixture
- When an iron metal is placed under salt water for many years, what will most likely to happen?
 - The iron metal will turn *rusty*.
 - The compound called *iron oxide* will form.
 - Rust will form.
 - All of the above.
- Which process is shown when a log burning in a fire place?
 - Combustion
 - Equation
 - Melting point
 - Erosion
- Can simple mixtures be separated?
 - Yes
 - No
 - Maybe
 - All of the above
- Which of these is not an example of **chemical reaction**?
 - Decomposition
 - Combination
 - Replacement
 - Corrosion
- I am known as special paper. I can help you find whether a substance is acid or base. What am I?
 - Litmus paper
 - Bond paper
 - Newsprint paper
 - Manila paper

7. Which of these simple machines consists of a rope or cable that runs through a grooved wheel?
- a. Pulley
 - b. Wheel and axle
 - c. Lever
 - d. Inclined plane
8. Door knob and steering wheel belongs to me. I am also a simple machine. What am I?
- a. Pulley
 - b. Wheel and axle
 - c. Lever
 - d. Inclined plane

VI. Circle the three kinds of chemical reaction.

decomposition combination replacement universal indicator

VII. Give the definition of the following terms. Write your responses on the space provided for.

1. Energy - _____
2. Kinetic Energy - _____
3. Potential Energy - _____
4. Mixtures - _____
5. Solutions - _____
6. Gravity - _____

VIII. Draw and label the parts of an atom.



IX. Write the formula & units to calculate the following:

Power:

Formula: _____

Units: _____

Work:

Formula: _____

Units: _____

Density: _____

Formula: _____

Units: _____

Volume: _____

Formula: _____

Units: _____

X. Explain how these simple machines work.

1. Pulley: _____

2. Wheel & Axle: _____

3. Lever: _____

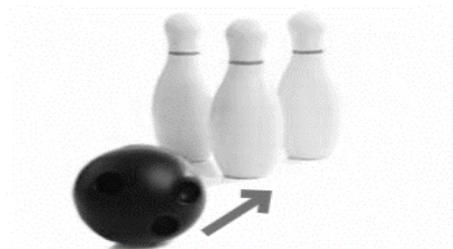
4. Inclined Planes: _____

XI. Write the different forms of energy shown in each picture.

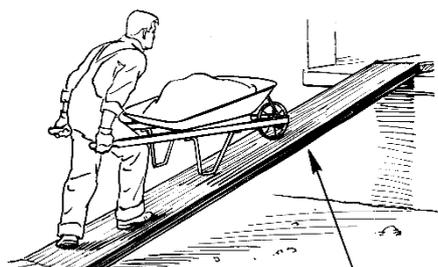
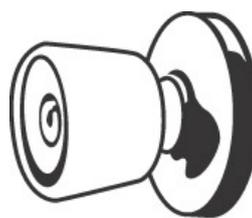
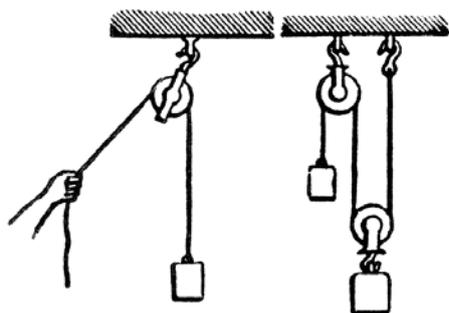




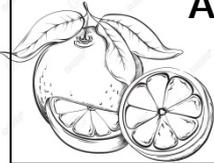
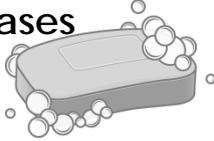




XII. Observe each picture and write which simple machine is shown.



XIII. List other examples of Acids and Bases.

 Acids	 Bases

XIV. Using your Periodic Table, find the atomic number and atomic mass of the following elements:

Uranium: _____

Potassium _____

Sulfur: _____

Gold: _____

Best of Luck!

Answer Key:**I. Modified True or False.**

- | | |
|-----------------|-------------|
| 1. Proton | 6. True |
| 2. Neutron | 7. elements |
| 3. Electron | 8. atom |
| 4. Concentrated | 9. True |
| 5. True | 10. True |

II. Read questions and write the correct answer on the space given for.

1. $L \times W \times H = V$
2. $10\text{m} \times 4\text{m} \times 5\text{m} = 200\text{m}$
3. 120 m
4. $D=M/V$
5. Mass
6. Agree
7. $5\text{ cm}^3, 5\text{ cm}^3, 2\text{ cm}^3, 8\text{ cm}^3$
8. Metals are abundant (many) than no-metals.
9. Answer may vary (example: oxygen, carbon, uranium)
10. Agree
11. When two like poles meet, they can push.
When two unlike poles meet, they can pull each other.
12. Periodic Table is arranged according to the number of protons. Larger atoms are on the right side of each row.
13. Hydrogen has 1 atomic number and 1.008 atomic mass.
14. Two elements
15. Crystals
16. Agree
17. Gold, silver, copper, iron, and nickel are elements while bronze, brass and steel are mixtures.
18. Water
19. Solution
20. Magnet
21. Two elements
22. Alexander Flemming
23. Banana
24. Work
25. Friction

III. Matching Type.

1. Constant motion 2. Variable motion 3. Periodic motion
4. circular motion 5. vibrational motion

IV. Write the chemical formula of the following:

1. Sugar 2. Salt 3. Water 4. Carbon dioxide

V. Multiple Choice.

1. A 2. A 3. A 4. A 5. D 6. A 7. A 8. B

VI. Kinds of Chemical Reaction.

Decomposition, combination, replacement

VII. Define the following words.

1. Energy – is the ability to do work.
2. Kinetic – energy due to motion.
3. Potential – energy that is not causing any changes now, but could cause any changes in the future.
4. Mixture- two or more substances that are mixed together but can be separated out because they are not chemically combined.
5. Solutions- a special mixture in which a substance breaks up into its most basic particles and spread evenly through another substance.
6. Gravity- the force of attraction that exists between any two objects; causes object to have weight.

VIII. Draw and label the parts of the atom.

-diagram

IX. Write the formula and units when calculating the following:

Power: formula: $\frac{W}{T} = P$ Units: watts

Density: formula: $\frac{D}{M} = V$ Units: g/cm³

Work: formula: $F \times D = W$ Units: joules

Volume: formula: $V = L \times W \times H$ Units: Cubic Centimeter cm³

Have a Great Time Studying!

