

NAME \_\_\_\_\_

SOL SCIENCE REVIEW  
MATTER SOL 5.4  
CELLS AND CLASSIFICATION  
SOL 5.5

1. This is NOT an example of matter:
  - a. a ball
  - b. a sound wave
  - c. a molecule of air
  - c. a drop of water
2. The smallest unit of matter is the:
  - a. molecule
  - b. atom
  - c. compound
3. Which can be seen without a microscope?
  - a. atoms
  - b. molecules
  - c. neither
4. All matter is made up of pure elements or elements which have combined to make other substances. There are over \_\_\_\_\_ known elements.
  - a. 10
  - b. 100
  - c. 1000
  - d. one million
5. The smallest part of an element is a(n):
  - a. molecule
  - b. cell
  - c. atom
6. When two or more elements combine chemically to form a NEW substance, the substance is called a:
  - a. mixture
  - b. compound
  - c. solution
7. The smallest unit of a compound is a(n):
  - a. atom
  - b. molecule
  - c. cell
8. Water (H<sub>2</sub>O) is a(n):
  - a. atom
  - b. compound
  - c. cell
9. H<sub>2</sub>O (water) is a compound formed from:
  - a. 2 hydrogen atoms and one oxygen atom
  - b. 2 oxygen atoms and one hydrogen atom.
10. Salt (NaCl) is a:
  - a. atom
  - b. compound
  - c. cell
11. When two substances combine but do not lose their original characteristics, they form a :
  - a. mixture
  - b. compound
12. Air is a \_\_\_\_\_ of many different gases.
  - a. compound
  - b. mixture
13. A \_\_\_\_\_ is a mixture in which one substance dissolves in another.
  - a. solution
  - b. compound
  - c. juice
14. Sugar dissolved in water is a:
  - a. solution
  - b. mixture
  - c. both
15. Which of the following is a compound?
  - a. sodium
  - b. oxygen
  - c. carbon dioxide
  - d. hydrogen

16. The smallest indivisible part of an element is:

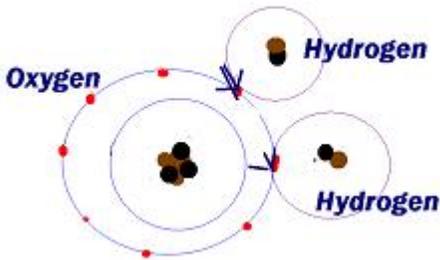
- a. a compound
- b. a solution
- c. an atom

17. Anything that has mass and takes up space is:

- a. matter
- b. volume
- c. weight
- d. state

18. Which statement is correct?

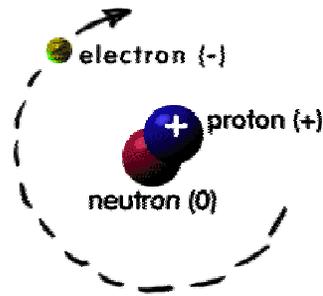
- a. Water molecules form from hydrogen and oxygen atoms.
- b. Water atoms form from hydrogen and oxygen molecules.



19. This is an example of a:

- a. water atom
- b. water molecule
- c. water cell

IT'S LIKE THIS...



20. Which part of the atom has a negative charge and orbits around the nucleus?

- a. proton
- b. neutron
- c. electron

21. Which part of the atom has a positive charge and is part of the atom's nucleus?

- a. neutron
- b. proton
- c. electron

22. Which part of an atom is in the nucleus and has no charge?

- a. neutron
- b. proton
- c. electron

23. Which is the most basic unit of living things?

- a. a bone
- b. a cell
- c. a tissue
- d. an organ

24. Which of the following is not made up of cells?

- a. a wooden table
- b. a flower
- c. a fingernail
- d. a snowball

MATCH THE TWO COLUMNS

25. Cell wall

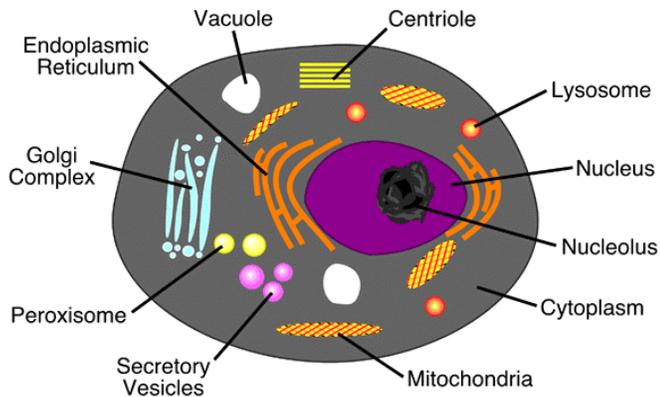
26. Vacuole

27. Nucleus

28. Cell membrane

29. Cytoplasm

30. Chloroplast



31. This cell is a :  
 a. plant cell  
 b. animal cell

32. This can't be a plant cell because it doesn't have:  
 a. a cell wall  
 b. chloroplasts  
 c. a large central vacuole  
 d. all of the above

\_\_\_ thin layer surrounding the cell that allows water and minerals to pass into and out of the cell

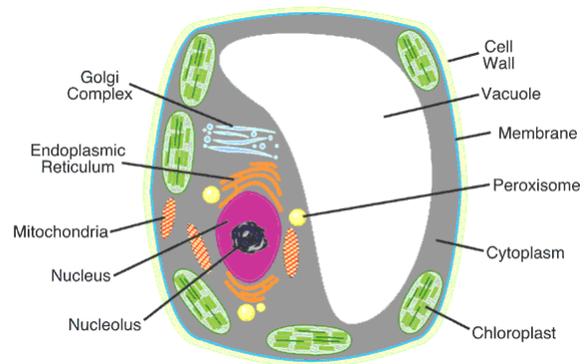
\_\_\_ jellylike substance that fills the cell

\_\_\_ tough outer covering of a PLANT cell

\_\_\_ control center of the cell

\_\_\_ storage sacs that hold water and other things. Plants cells have one large one and animal cells have many small ones.

\_\_\_ plant organelle needed for photosynthesis.



33. This is:  
 a. a plant cell  
 b. an animal cell

34. What does this cell have that's only found in plants?  
 a. a cell wall  
 b. chloroplasts  
 c. a large central vacuole  
 d. all of the above

35. An animal classified as an invertebrate does not have a(n):

- a. exoskeleton.
- b. compound eye.
- c. backbone.
- d. shell.

36. Which of the following are vertebrates?

- a. monkeys, frogs, snakes
- b. jellyfish, beetles, bloodworms
- c. anemones, worms, butterflies
- d. wasps, coral, clams

37. Which of the animals listed below is a vertebrate?

- a. lizard
- b. starfish
- c. spider
- d. clam

38. Which of the animals listed below is an invertebrate?

- a. shark
- b. seagull
- c. lion
- d. jellyfish

**Many scientists classify all living things into five kingdoms: monera, protista, fungi, plants, and animals.**

39. All organisms in this kingdom make their own food using energy from the sun:

- a. plant kingdom
- b. animal kingdom
- c. fungi kingdom
- d. monera kingdom
- e. protist kingdom

40. Organisms belonging to this kingdom are single-celled:

- a. plant
- b. animal
- c. fungi
- d. monera

41. The process of using the sun's energy to make food is called:

- a. symbiosis
- b. biotics
- c. photosynthesis
- d. mutualism

42. Mushrooms belong to this kingdom:

- a. plant
- b. animal
- c. fungi
- d. monera
- e. protista

43. Bacteria belong to this kingdom -

- a. plant
- b. animal
- c. fungi
- d. monera
- e. protista

44. Which are producers?

- a. animals
- b. consumers
- c. plants
- d. herbivores