

You should be able to do the following:

1. Define all of the following words:

science, hypothesis, safety, stimulus, cell, bacteria, cell theory, cell membrane, cell wall, chloroplasts, cytoplasm, eukaryotic, mitochondria, organelle, prokaryotic, nucleus, vacuoles, viruses, ribosome, protein, vesicles, Golgi body, lysosome, diffusion, osmosis, selectively permeable membrane, concentration, permeable, tissues, organs, body systems, organisms, diaphragm, lungs, epiglottis, trachea, bronchi, bronchioles, alveoli, gas exchange, plasma, red blood cells, white blood cells, platelets, arteries, veins, capillaries, heart, right ventricle, left ventricle, right atrium, left atrium, esophagus, peristalsis, stomach, duodenum, small intestine, large intestine, antigen, pathogen, mucus, inflammation, phagocytes, B cells, T cells, active immunity, vaccine, allergies, organ transplants, AIDS.

2. List the steps of the scientific method in order and describe each step.
3. Design an experiment and prediction to test a hypothesis.
4. Make a conclusion based on an hypothesis, prediction, and completed experiment.
5. List several safety rules of a science lab.
6. List the 5 characteristics of living things, give an example of each.
7. Give examples of non-living things which satisfy some (but not all) of the characteristics.
8. List the 3 ideas of cell theory.
9. Label a cell diagram with organelles.
10. Explain the differences between animal and plant cells.
11. Match organelles to their function.
12. Explain the difference and similarities between diffusion and osmosis.
13. Predict what will happen in several situations involving diffusion and osmosis.
14. Give 2 examples of selectively permeable membranes.
15. List the levels of organization in the body in order as: cell, tissue, organ, body system, organism.
16. List the 3 characteristics of a system.
17. Explain why something is a system with reference to these 3 characteristics.
18. Match the 11 body systems to their functions.
19. Create a diagram of the respiratory system with diaphragm, lungs, pharynx, epiglottis, trachea, bronchi, bronchioles and alveoli labeled.
20. Explain how the diaphragm makes you breath.
21. Explain what happens during gas exchange in the alveoli.
22. List the 4 things blood is made of.
23. Create a diagram of the circulatory system with right/left ventricle, right/left atrium, arteries, veins, capillaries, pulmonary artery, pulmonary vein, and lungs labeled.
24. List the 4 stages of digestion and explain each briefly.
25. List the 5 types of nutrients the body needs.
26. Explain why the body needs water.
27. Create a diagram of the digestive system with mouth, esophagus, stomach, duodenum, small intestine, large intestine, and anus labelled.
28. List 4 ways to receive infectious diseases and give an example of each.
29. Explain what the body's first line of defence consists of.
30. Explain what occurs during an innate immune response.
31. Explain how active immunity is created.
32. Explain how vaccines work.
33. Explain why people have allergic reactions.
34. Explain why organ transplants can be rejected.
35. Explain what AIDS does to the body.