COMPLETE INTRODUCTION TO BIOLOGY (GRADES 9+)

KT-BIOLHSC

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Science Foundations Series

TABLE OF CONTENTS:

Test Type	Result
Leukocytes	
Nitrite	
Urobilinogen	
Protein	
pH	
Blood	
Sp. Gravity	
Ketone	
Bilirubin	
Glucose	

What happened?

What you performed is known as **urinalysis** or a test of urine. The following sections show what each of the tests indicates. However, work with your doctor to learn more and better understand what the results of your urinalysis mean. Be aware that it is unlikely you have any of the conditions included with various tests indicated in the information on the next few pages. If you have one of the conditions, you are likely already aware and working with a medical professional to address it.

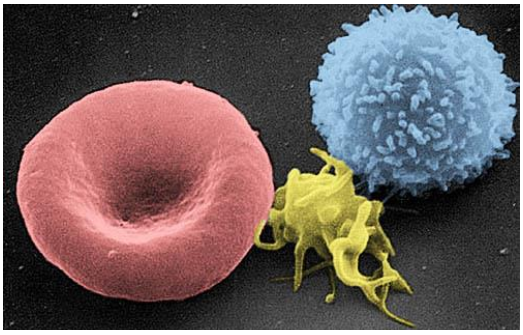

Figure 9. Electron Microscope Image of a Red Blood Cell (left), Platelet (middle), and Leukocyte (right).

Leukocytes

Leukocytes are white blood cells and are naturally found in the blood. They are part of the body's immune system and help the body fight infection and disease. Urine is filtered from blood in the kidneys. Through blood filtering, some leukocytes do end up in urine. If a high number of leukocytes are found in urine, it could be a sign of infection somewhere in the urinary tract.

An individual with damage to this part of the brain will likely suffer from some loss of motor movement, including the inability to make rapid movements, have movement tremors, and staggering when walking. They might also have the inability to judge distances. While the individual will still be able to use their muscles and move, they will be less coordinated when doing so.

DIGESTION

The digestive system is the final body system that you will learn about in this kit before we take a deep dive into the microscopic world of microbiology. The digestive system is responsible for moving food into, through, and out of the body. It consists of the mouth, esophagus, stomach, small intestine, large intestine, rectum, and anus, with help from the pancreas, gallbladder, and liver.

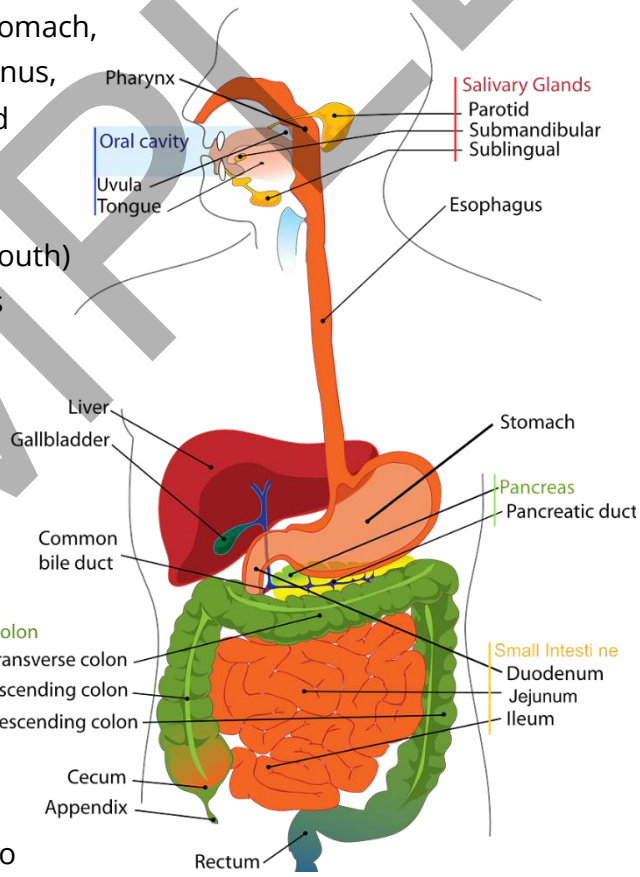

Figure 16. Diagram of the Digestive System.

This body system begins in the oral cavity (mouth) with the tongue and teeth. When food enters the oral cavity, the tongue and teeth masticate (chew) the food. After mastication, the individual swallows, sending the food down the throat and into the esophagus. The esophagus is lined with muscles that contract to push the food down into the stomach.

The stomach has two main functions – store food and break down food through digestion. The food molecules entering the stomach are too large to be absorbed into the blood. Therefore, through digestion, those large insoluble food molecules are broken down into small water-soluble food molecules.

Next, food then enters the small intestine, which continues the digestion process with the help of enzymes. **Enzymes** help to speed up the process of food breakdown. The small intestine absorbs most of the nutrients from your food into the bloodstream. Anything not absorbed into the bloodstream moves on to the large intestine.

13. Draw a picture of each colony type in the table. You can use colored pencils or crayons to add detail.
14. Identify the morphology of each colony, including the Form, Elevation, and Margin, in the table.

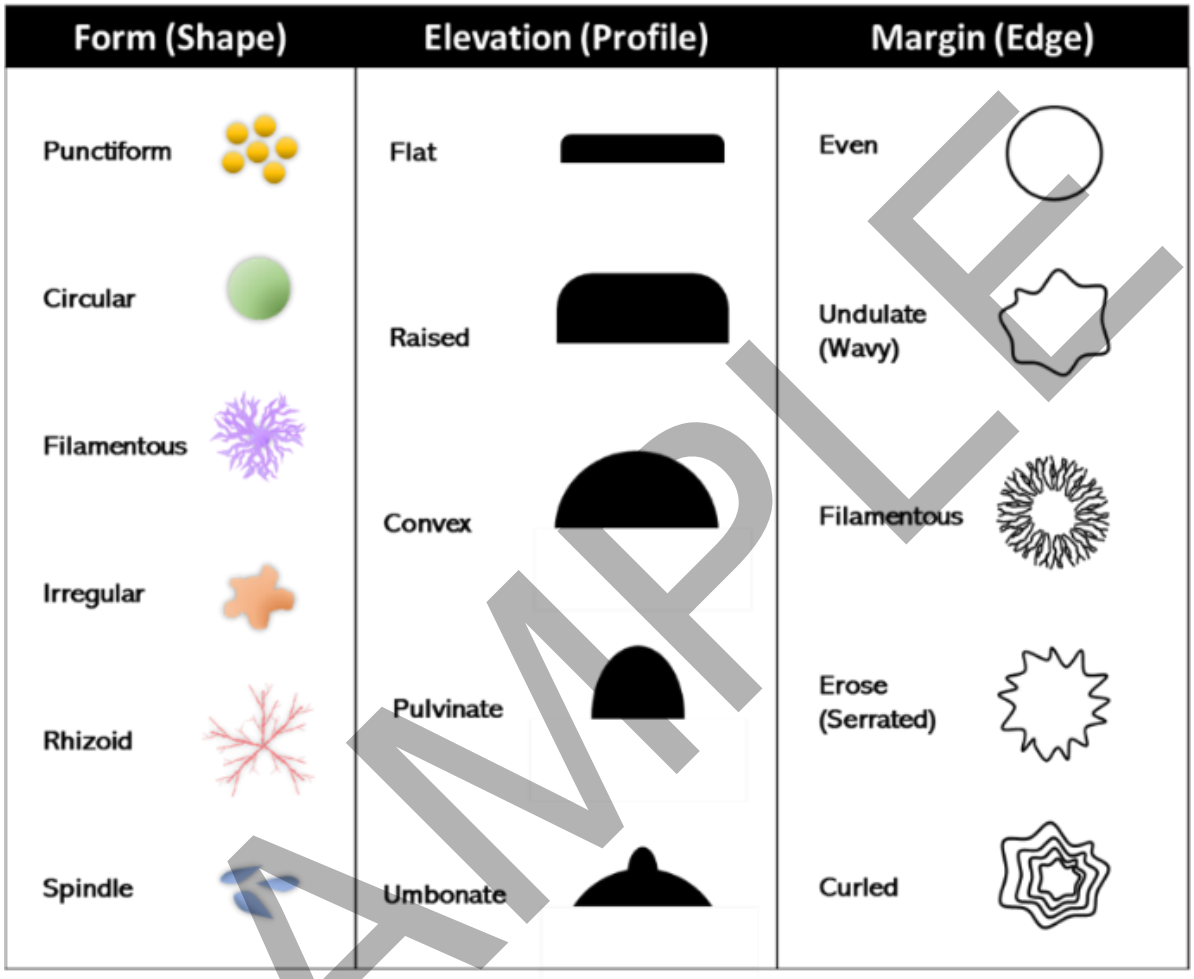

Figure 22. Colony morphology descriptions.