

Cell City Worksheet – high school

The "Virtual Cell" will allow you to get a close-up view of several organelles in 3-D! You will be able to choose certain organelles within the cell and manipulate them by zooming in on the organelle, rotating the image, and dissecting several organelles to view their contents. The intent of the activity is to provide you with a better feeling of the appearance (structure), function, and location of the organelles.

You should explore the following organelles within "The Virtual Cell": Please check them off as you go.

*** The "Virtual Cell" will provide you with more information to add to your Organelle Table.

I. Click on the "Virtual Cell Tour" and answer the following questions:

1.1. **Centrioles** are only found in _____ cells. They function in cell _____ . They have _____ groups of _____ arrangement of the protein fibers. Draw a picture of a centriole in the box.

2.2. **Lysosomes** are called _____ sacks. They are produced by the _____ body. They consist of a single membrane surrounding powerful _____ enzymes. Those lumpy brown structures are digestive _____. They help protect you by _____ the bacteria that your white blood cells engulf. _____ act as a clean up crew for the cell. Zoom in and draw what you see.

3.3. **Chloroplasts** are the site of _____. They consists of a _____ membrane. The stacks of disk like structures are called the _____. The membranes connecting them are the _____ membranes. Zoom in and draw a picture.

Centriole
Lysosomes
Chloroplasts