

### 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.

<b>Centriole</b>
<b>Lysosomes</b>
<b>Chloroplasts</b>