

Name: _____

Cells Alive- Internet Lessonwww.cellsalive.com

Objectives: Understand the relative sizes of objects, including the cell, sketch and identify the function of cell structures; compare eukaryote to prokaryote cells; compare plant and animal cells.

Part A. "HOW BIG IS A...." (click on the interactive link "howbig" to access this page)

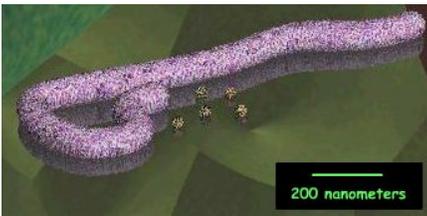
Instructions: Look at the objects that can be found on the head of a pin. Zoom in and out to determine which object is the smallest, then slowly zoom out so you can see how other objects compare.

1. If you zoom all the way in, what is the smallest object on the head of the pin? _____
Zoom out a little farther, what is the hook shaped object you see? _____

2. Compare each of the following objects on the pin, circle the one that is larger.

- | | |
|-------------------------------------|--------------------------|
| a) baker's yeast or e. coli | b) lymphocyte or ragweed |
| c) red blood cell or staphylococcus | d) ragweed or dust mite |

3. In the photo below, there is a line that says 200 nanometers. This is used to help you determine how big an object is. It works similar to the way a map works. The line represents 200 nanometers, but the object itself is bigger. Use the line to estimate how many lines (200 each) would fit across the object.



How big is it? _____

Part B: Go to Cell Models and locate the image of a bacterial cell. Label the image below.

