

Searching for Scale

Name: _____ Date: _____

Biological Structure	Actual Diameter (in Meters)	Size Relative to Cell	Object Used to Model Biological structure	Measured Size of Model Object	Size Relative to Model Cell (the Room)
Cell	1×10^{-5}	$\frac{1 \times 10^{-5}}{1 \times 10^{-5}} = 1$	Room	10 meters	$\frac{10}{10} = 1$
Bacterium	1×10^{-6}	$\frac{1 \times 10^{-6}}{1 \times 10^{-5}} = \frac{1}{10}$	Desk	1 meter	$\frac{1}{10} = \frac{1}{10}$
Mitochondrion	5×10^{-7}	$\frac{5 \times 10^{-7}}{1 \times 10^{-5}} = \frac{1}{20}$			
Virus	1×10^{-7}				
Ribosome	1×10^{-8}				
Protein	5×10^{-9}				
Glucose molecule	1×10^{-9}				
H ₂ O molecule	1×10^{-10}				