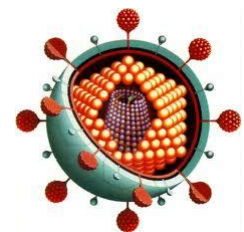
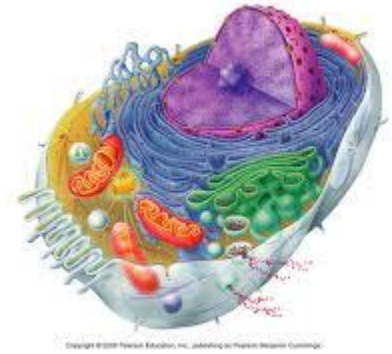
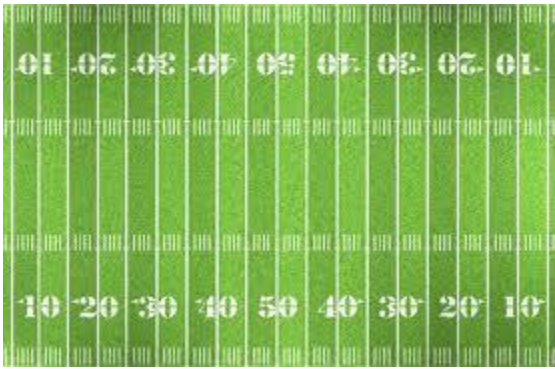
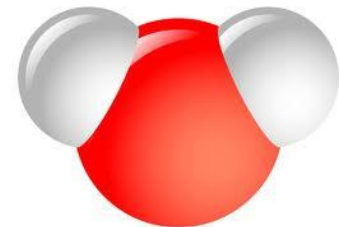
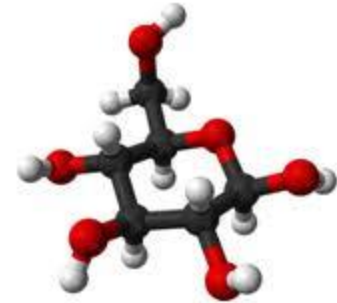
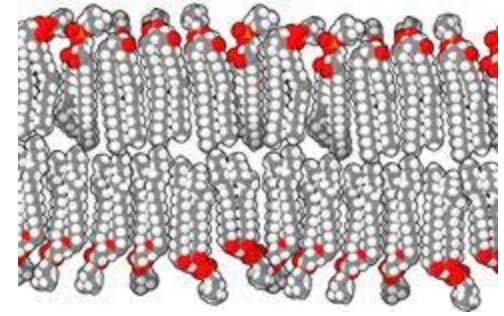


Structure	Actual Diameter in SI unit	Actual diameter (in meters)	Actual diameter (in sci-notation)	Size Relative to Eukaryotic Cell	Object used to model structure
Eukaryotic Cell	(up to) 100 μm	0.0001 m	1×10^{-4} m	$\frac{0.0001 \text{ m}}{0.0001 \text{ m}} = 1$	Football field
Organelles	(up to) 10 μm	0.00001 m	1×10^{-5} m	$\frac{0.00001 \text{ m}}{0.0001 \text{ m}} = 0.1$	
Bacterium	1 μm	0.000001 m	1×10^{-6} m	$\frac{0.000001 \text{ m}}{0.0001 \text{ m}} = 0.01$	
Virus	100 nm	0.0000001 m	1×10^{-7} m	$\frac{0.0000001 \text{ m}}{0.0001 \text{ m}} = 0.001$	
Cell membrane thickness	10 nm	0.00000001 m	1×10^{-8} m	$\frac{0.00000001 \text{ m}}{0.0001 \text{ m}} = 0.0001$	
Glucose molecule	1 nm	0.000000001 m	1×10^{-9} m	$\frac{0.000000001 \text{ m}}{0.0001 \text{ m}} = 0.00001$	
Water molecule	0.1 nm	0.0000000001 m	1×10^{-10} m	$\frac{0.0000000001 \text{ m}}{0.0001 \text{ m}} = 0.000001$	





A good video to show scale

2.1.4

Compare the relative sizes of molecules, cell membrane thickness, viruses, bacteria, organelles and cells, using the appropriate SI unit.

