

HOW SMALL IS NANO?

Measuring Different Things



Macrosizes

meters, decimeters, centimeters, millimeters

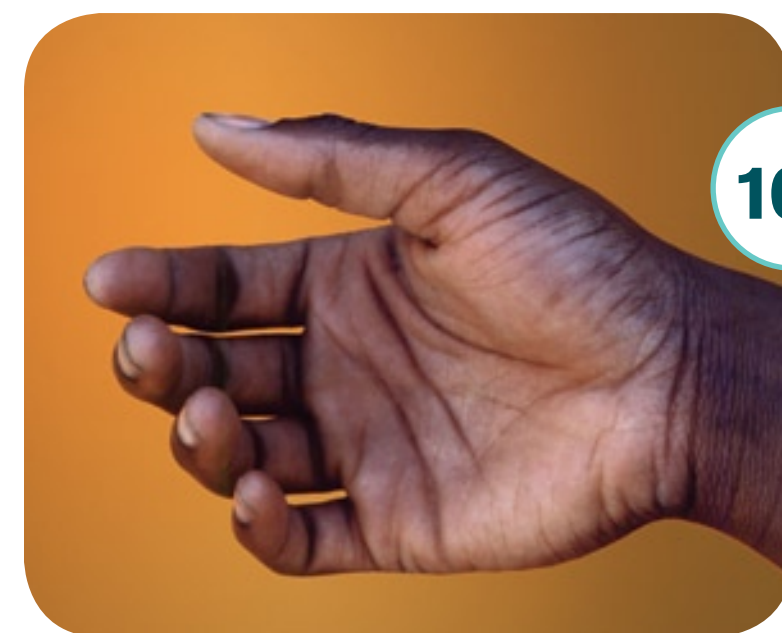
Child



10^0

A child is about 1 meter tall
1 meter = 1,000,000,000 nm
(1 billion nanometers)

Hand



10^{-1}

A hand is about 1 decimeter wide
1 decimeter = 100,000,000 nm
(100 million nanometers)

Pinky Finger



10^{-2}

A pinky finger is about 1 centimeter wide
1 centimeter = 10,000,000 nm
(10 million nanometers)

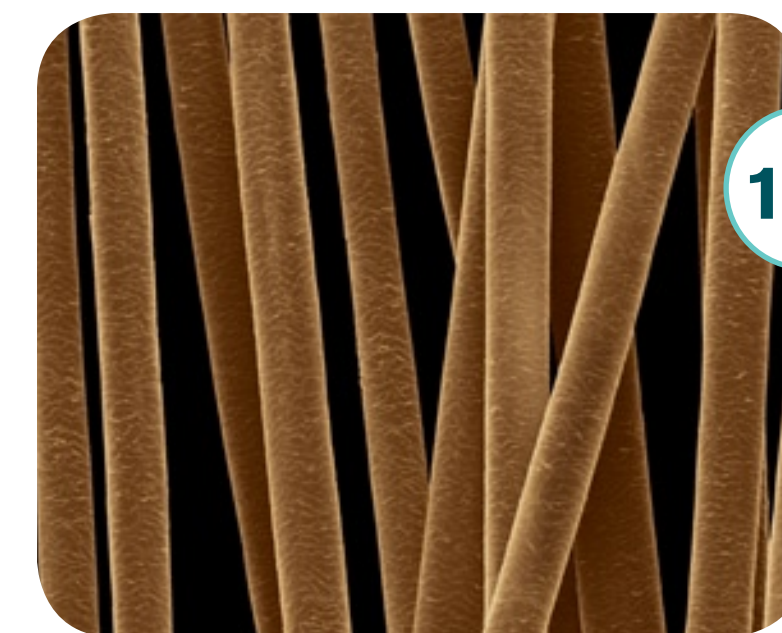
Freckle



10^{-3}

A freckle is about 1 millimeter wide
1 millimeter = 1,000,000 nm
(1 million nanometers)

Strand of Hair



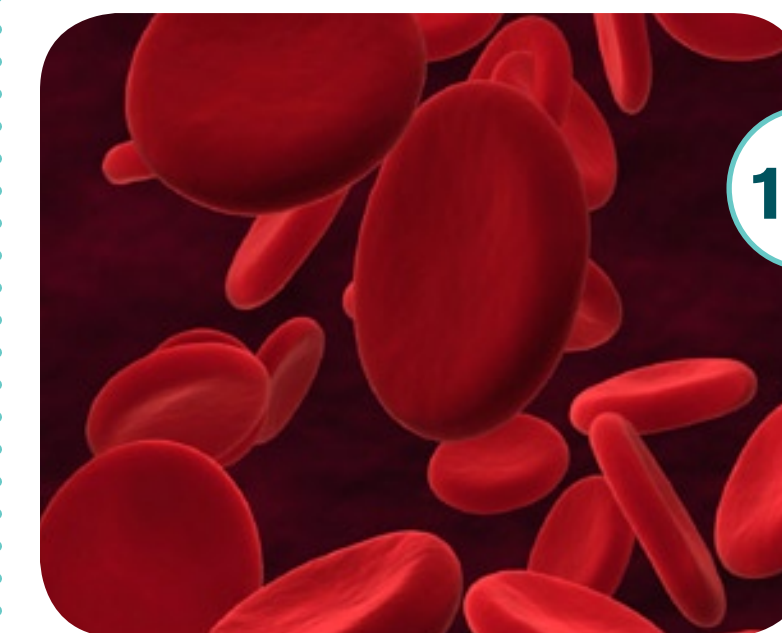
10^{-4}

A hair is about one tenth of a millimeter wide
0.1 millimeter = 100,000 nm
(100 thousand nanometers)

Microsize

micrometers

Red Blood Cell



10^{-5}

A red blood cell is about 10 micrometers wide
10 micrometers = 10,000 nm
(10 thousand nanometers)

Bacteria



10^{-6}

A bacteria is about 1 micrometer wide
1 micrometer = 1,000 nm
(1 thousand nanometers)

Virus



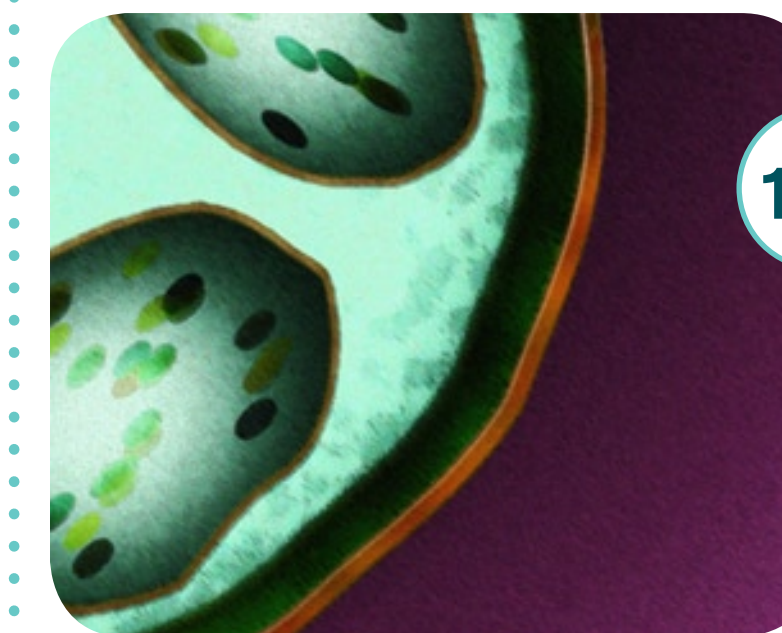
10^{-7}

A virus is about one tenth of a micrometer wide
0.1 micrometer = 100 nm
(1 hundred nanometers)

Nanosize

nanometers

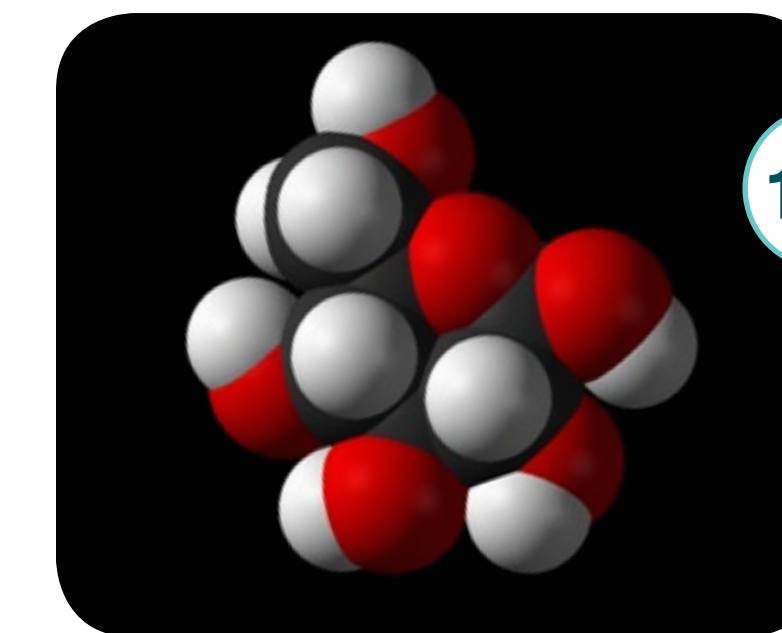
Cell Membrane



10^{-8}

A cell membrane is about 10 nanometers wide
10 nanometers = 10 nm

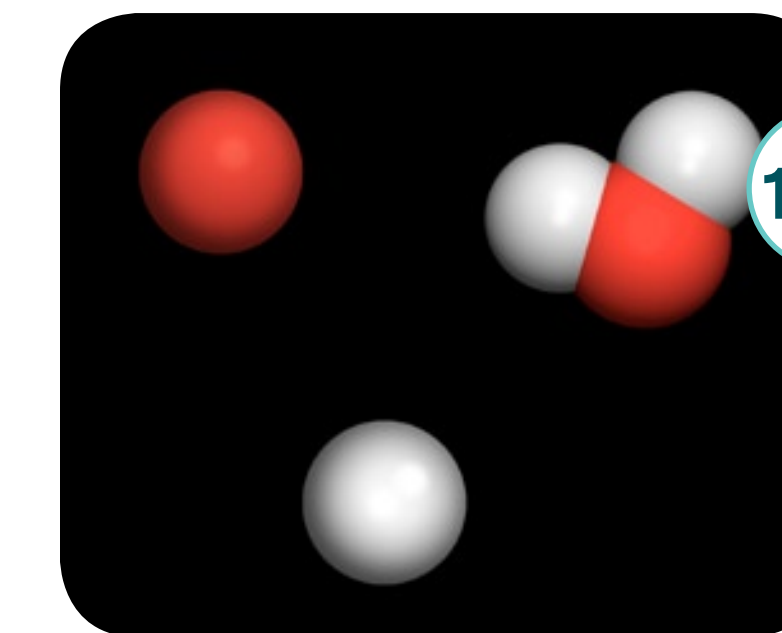
Sugar Molecule



10^{-9}

A sugar molecule is about 1 nanometer wide
1 nanometer = 1 nm

Atom



10^{-10}

An atom is about one tenth of a nanometer wide
0.1 nanometer = 0.1 nm



Emily Maletz
graphic design



NISE
network

Created in 2008 by ScienceCenter, Ithaca, NY. www.sciencecenter.org
Accompanying book available for purchase at www.lulu.com

This material is based upon work supported by the National Science Foundation under Agreement No. ESI-0529396.
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