

Object	Measurement	Actual Size	Sized Up by 10^6 (one million times larger)
Human hair	diameter	80 μm $80 \times 10^{-6} \text{ m}$	80 m $80 \times 10^0 \text{ m}$
Human adult	average height (males and females averaged together)	1.7 m $1.7 \times 10^0 \text{ m}$	1700 km $1.7 \times 10^6 \text{ m}$
Human cheek cell	diameter	30 μm $30 \times 10^{-6} \text{ m}$	30 m $30 \times 10^0 \text{ m}$
Plasma membrane (cell membrane)	thickness	7 nm $7 \times 10^{-9} \text{ m}$	7 mm $7 \times 10^{-3} \text{ m}$
Human liver cell	diameter	20 μm $20 \times 10^{-6} \text{ m}$	20 m $20 \times 10^0 \text{ m}$
Nucleus of a human liver cell	diameter	8 μm $8 \times 10^{-6} \text{ m}$	8 m $8 \times 10^0 \text{ m}$
DNA molecule	diameter x length in one chromosome	2 nm (diameter) x 60 mm (length) $2 \times 10^{-9} \text{ m}$ (diameter) by $60 \times 10^{-3} \text{ m}$ (length)	2 mm (diameter) x 60 km (length) $2 \times 10^{-3} \text{ m}$ (diameter) by $60 \times 10^3 \text{ m}$ (length)
Mitochondrion	length x width	2 μm (length) x 1 μm (width) $2 \times 10^{-6} \text{ m}$ (length) by $1 \times 10^{-6} \text{ m}$ (width)	2 m (length) x 1 m (width) $2 \times 10^0 \text{ m}$ (length) by $1 \times 10^0 \text{ m}$ (width)
Human egg cell	diameter	150 μm $150 \times 10^{-6} \text{ m}$	150 m $150 \times 10^0 \text{ m}$
Human sperm cell	diameter	4 μm $4 \times 10^{-6} \text{ m}$	4 m $4 \times 10^0 \text{ m}$
<i>Elodea</i> cell	length x width	50 μm (length) x 25 μm (width) $50 \times 10^{-6} \text{ m}$ (length) by $25 \times 10^{-6} \text{ m}$ (width)	50 m (length) x 25 m (width) $50 \times 10^0 \text{ m}$ (length) by $25 \times 10^0 \text{ m}$ (width)

Object	Measurement	Actual Size	Sized Up by 10^6 (one million times larger)
Onion skin cell	length x width	300 μm $300 \times 10^{-6} \text{ m}$	300 m $300 \times 10^0 \text{ m}$
Chloroplast	length x width	8 μm (length) x 2 μm (width) $8 \times 10^{-6} \text{ m}$ (length) by $2 \times 10^{-6} \text{ m}$ (width)	8 m (length) x 2 m (width) $8 \times 10^0 \text{ m}$ (length) by $2 \times 10^0 \text{ m}$ (width)
Stoma aperture (opening)	diameter open and closed	12 μm (open) and 3 μm (closed) $12 \times 10^{-6} \text{ m}$ (open) and $3 \times 10^{-6} \text{ m}$ (closed)	12 m (open) and 3 m (closed) $12 \times 10^0 \text{ m}$ (open) and $3 \times 10^0 \text{ m}$ (closed)
<i>Streptococcus pyogenes</i> bacteria (causing many different human infections)	diameter	900 nm $900 \times 10^{-9} \text{ m}$	900 mm $900 \times 10^{-3} \text{ m}$
<i>Salmonella enteritidis</i> bacteria (causes food poisoning)	diameter	600 nm $600 \times 10^{-9} \text{ m}$	600 mm $600 \times 10^{-3} \text{ m}$
Human Immunodeficiency Virus (causes HIV disease and AIDS)	diameter	110 nm $110 \times 10^{-9} \text{ m}$	110 mm $110 \times 10^{-3} \text{ m}$
Coronavirus (causes several diseases in humans, including COVID-19)	diameter	120 nm $120 \times 10^{-9} \text{ m}$	120 mm $120 \times 10^{-3} \text{ m}$