

# Powers of Ten

| Benchmark Scale        | Power of Ten | Decimal Style   |            |
|------------------------|--------------|-----------------|------------|
| Large scale            | $10^7$ m     | 10,000,000 m    | kilometer  |
|                        | $10^6$ m     | 1,000,000 m     |            |
|                        | $10^5$ m     | 100,000 m       |            |
|                        | $10^4$ m     | 10,000 m        |            |
|                        | $10^3$ m     | 1,000 m         |            |
| Macroscopic scale      | $10^2$ m     | 100 m           | meter      |
|                        | $10^1$ m     | 10 m            |            |
|                        | $10^0$ m     | 1 m             | millimeter |
|                        | $10^{-1}$ m  | 0.1 m           |            |
|                        | $10^{-2}$ m  | 0.01 m          |            |
|                        | $10^{-3}$ m  | 0.001 m         |            |
| Microscopic scale      | $10^{-4}$ m  | 0.0 001 m       | micrometer |
|                        | $10^{-5}$ m  | 0.00 001 m      |            |
|                        | $10^{-6}$ m  | 0.000 001 m     |            |
|                        | $10^{-7}$ m  | 0.0 000 001 m   |            |
| Atomic-molecular scale | $10^{-8}$ m  | 0.00 000 001 m  | nanometer  |
|                        | $10^{-9}$ m  | 0.000 000 001 m |            |