

Physics

Measurement

- There is Unit and There is standard

EXP length L $m, km \dots$

standard Unit

International system of units (SI)

Changing

units : Chain-link conversion

Multiply the original measurement by a **conversion factor**

- International system = metric system

• Base quantities :- + Temp + electrical current

- Length : (Meter) : The Distance Traveled by light During a precisely specified Time interval $1/299\,792\,458$ seconds

- Mass : (Kg) : platinum-iridium standard cylinder
(Atomic Mass) : atom Carbon -12

- Time : (second) : oscillations of light emitted by an atom (cesium-133)
الزمن / توقيت

• Density: $\rho = \frac{m}{V}$

Problems to revise :-

simple problem: p 7

(P53) = 1 parsec = 2.0826×10^5 au
= 3.261

Revise

Chap 2 P9 p 30

giga	10^9
mega	10^6
kilo	10^3
Centi	10^{-2} c
milli	10^{-3} m
micro	10^{-6} μ
nano	10^{-9} n
pico	10^{-12} p

femto	10^{-15}
pico	10^{-12}
Angstrom	10^{-10}
nan	10^{-9}
micro	10^{-8}

Alaa Etaiwi