

Physics

Measurement

- There is Unit and There is standard

Exp length $\frac{L}{\downarrow}$ m, km ...

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) : atomic Carbon -12

- Time : (second) : oscillations of light emitted by an atomic (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 p 9 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