

30.01.2019

ELL301

# Units & Standards

Fundamental  
↙

M - kg

L - m

T - s

K - K

luminosity - Cd

amount of matter - mol

A - A

↳

Derived units

↓ what is 'one' unit?

o platinum-iridium cylinder → h

→ Distance travelled by light in  $\frac{1}{c}$  second.

→ Time taken by light to travel  $\leq$  distance.

↗ unit  
 SI definition  
 ↘ time taken for Cs-133  
 to perform  $\langle 10\text{-digit number} \rangle$  of oscillations  
 ⇒ definition of time

↗ fundamental constant  
 ↘ another unit