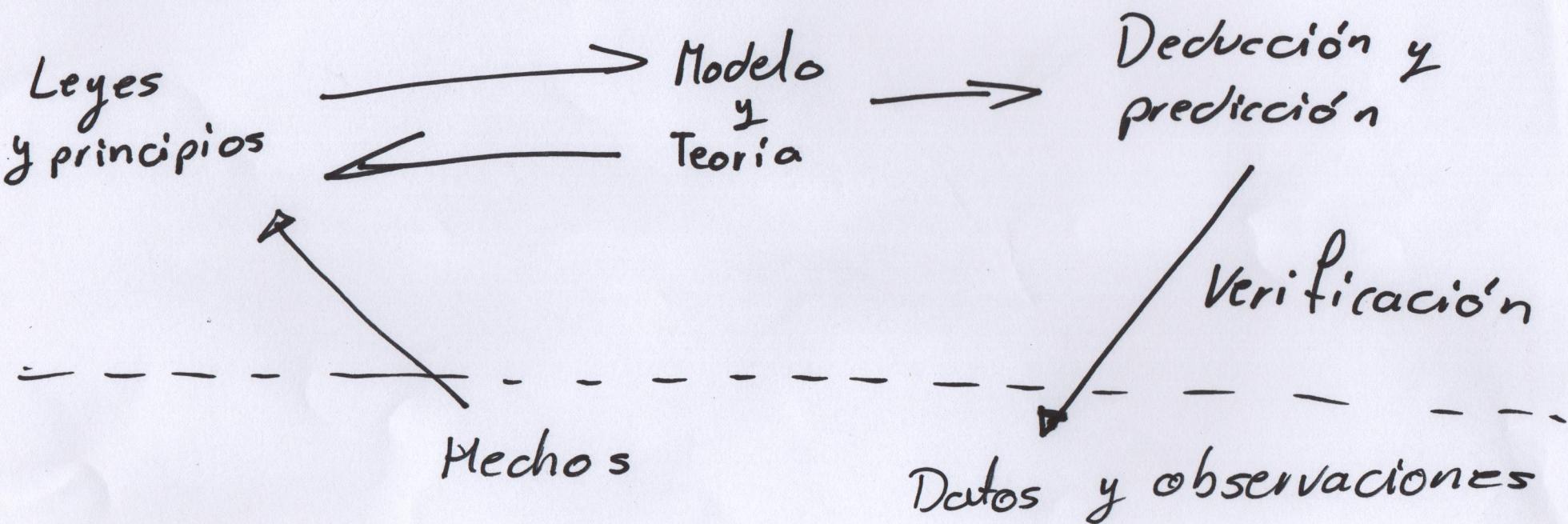


Physics

- ¿Qué es la física?
- Aplicaciones de la física



Análisis dimensional

- Observables.
 - Modelos consistentes.
 - Intuición del valor esperado
 - Estructura básica de una ecuación

Ej:

$$\vec{F}_e = k \frac{q_1 q_2}{r^2} \hat{r}$$

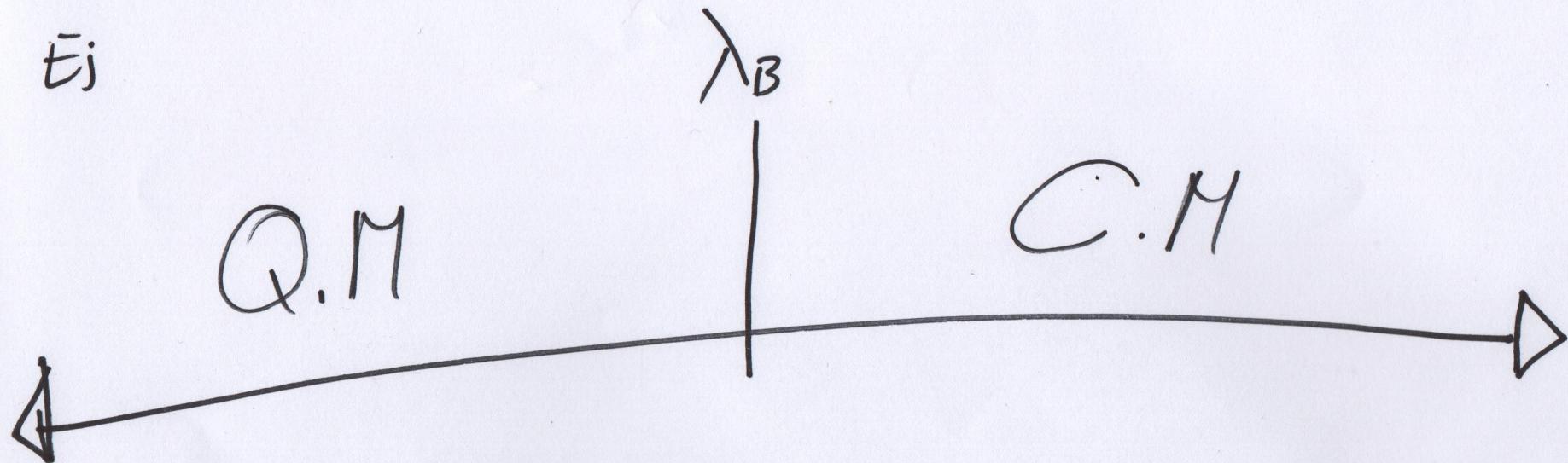
interacción física.

Geometría.

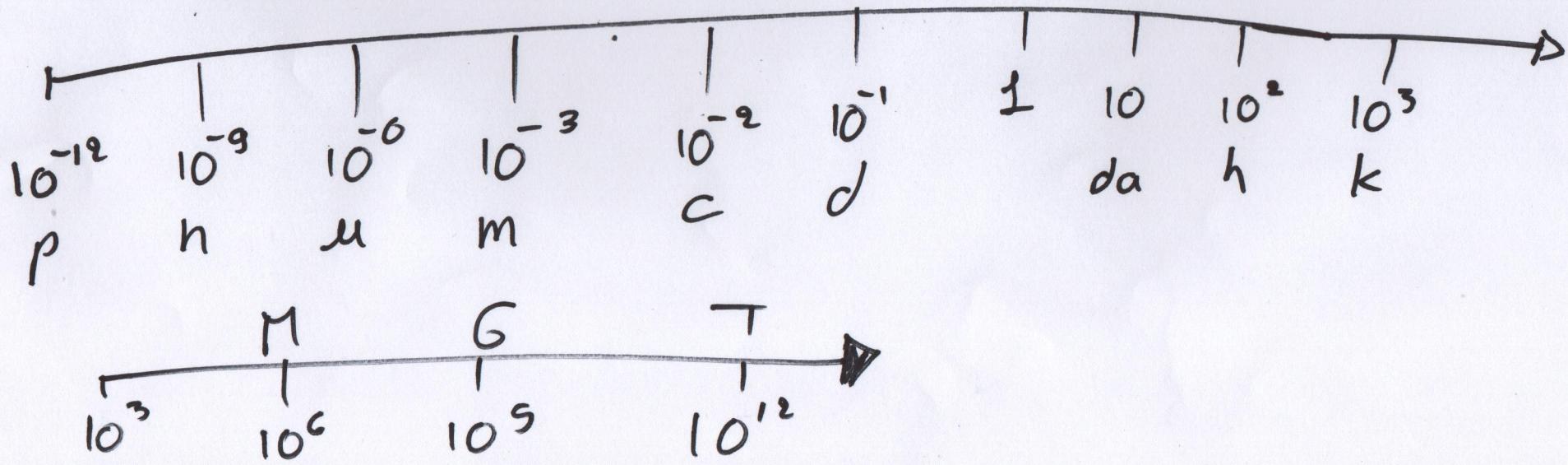
(Interacción con el medio)

→ Escalas

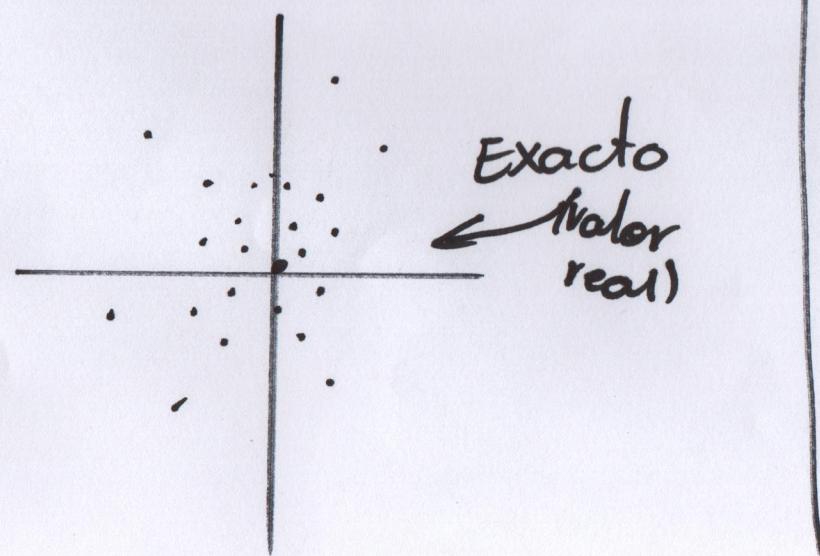
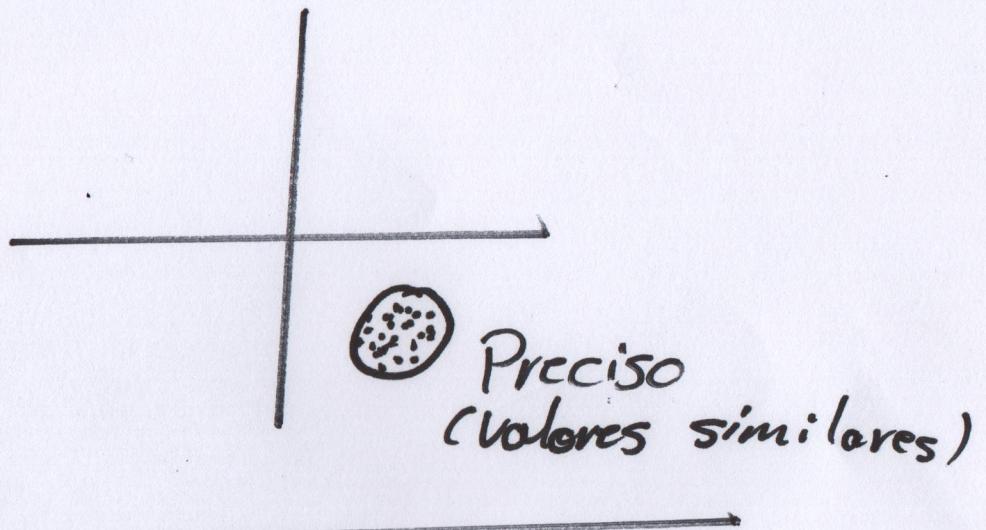
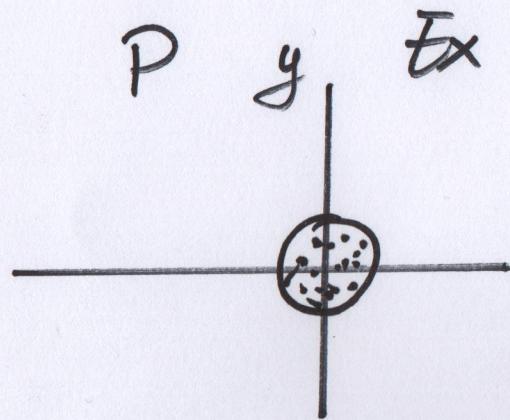
Ej



→ Prefijos del S.I.

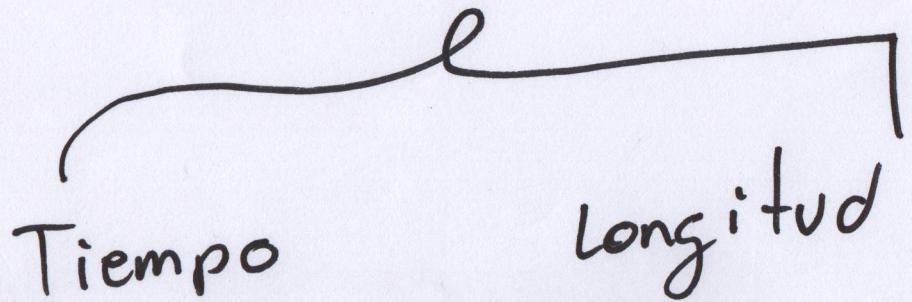


→ Mediciones



Unidades.

Intuitivas



M K S A \rightarrow amperio
↓ ↓ ↓
metro kilogramo segundo

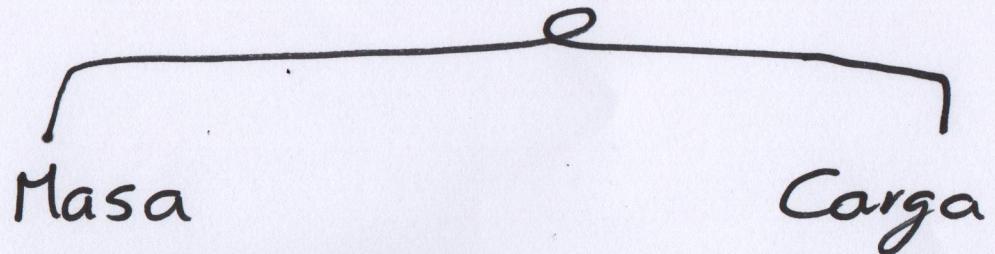
$$\text{Tiempo} = [T]$$

$$\text{longitud} = [L]$$

$$\text{Masa} = [M]$$

$$\text{Carga} = [Q]$$

Conceptuales.



$$\text{metro} = C \cdot \frac{1}{299,792\,458} \text{ s} ; C = 3 \times 10^8 \text{ m/s}$$

$$\begin{aligned} \text{kilogramo} &\rightarrow h^{133} \\ \text{Tiempo (segundo)} &\rightarrow [S] \\ \text{Amperio} &\rightarrow [A] \end{aligned}$$