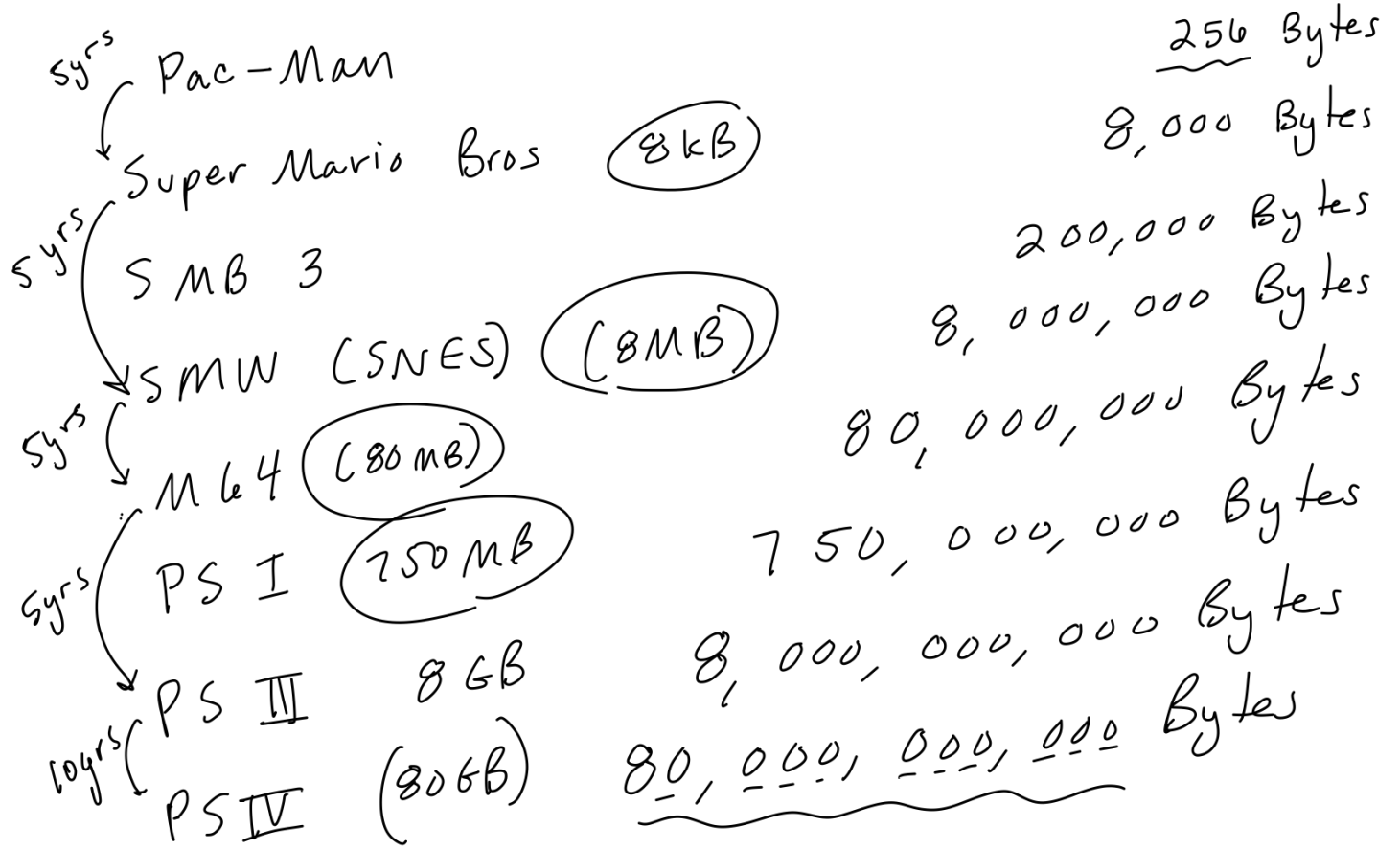
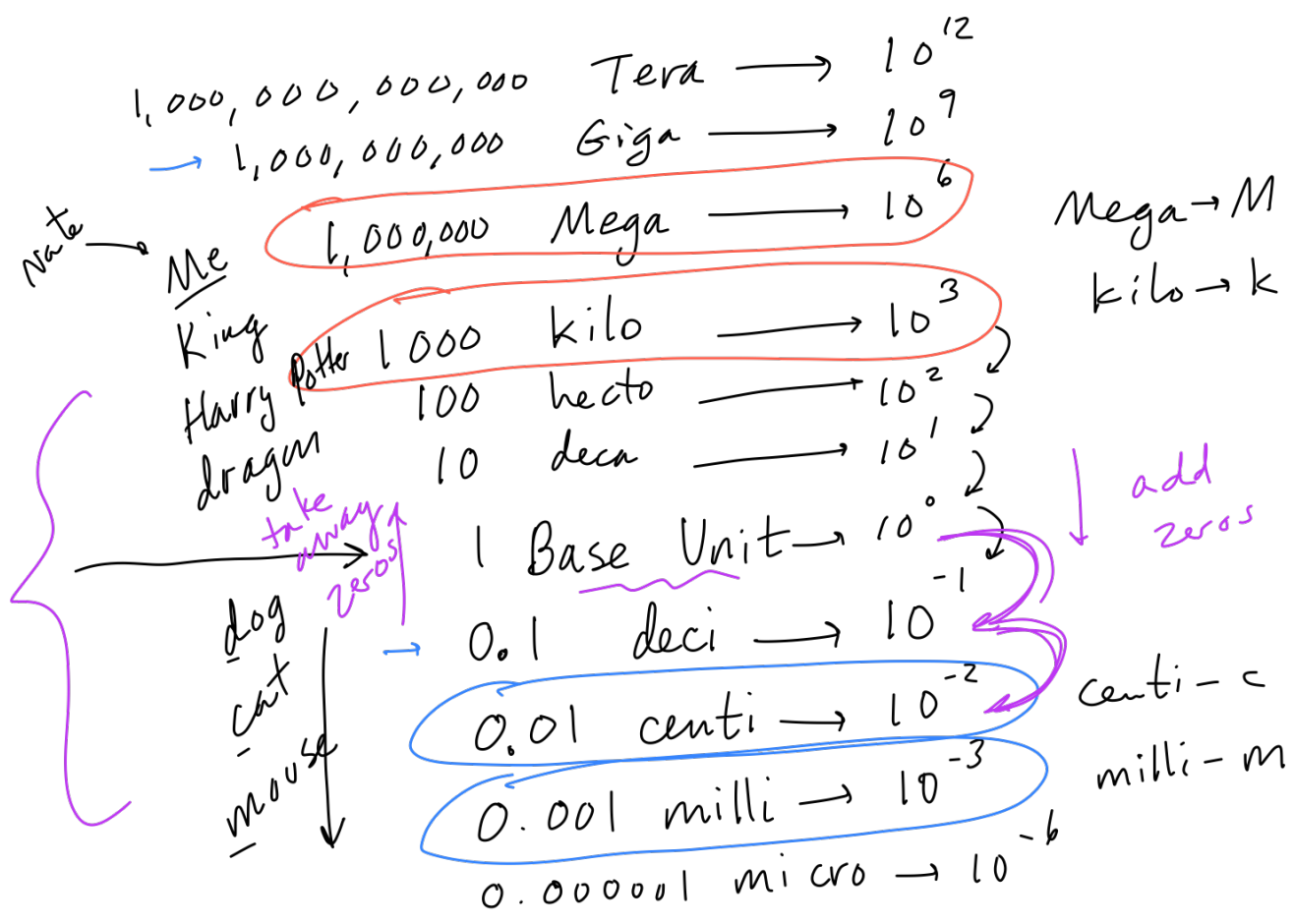


$$E = mc^2$$

Energy = mass * (speed of light)²

$3 * 10^8 \text{ m/s}$





23 meters → _____ cm

$$23\text{m} * \left\{ \frac{100\text{ cm}}{1\text{ m}} \right\} = \boxed{2300\text{ cm}}$$

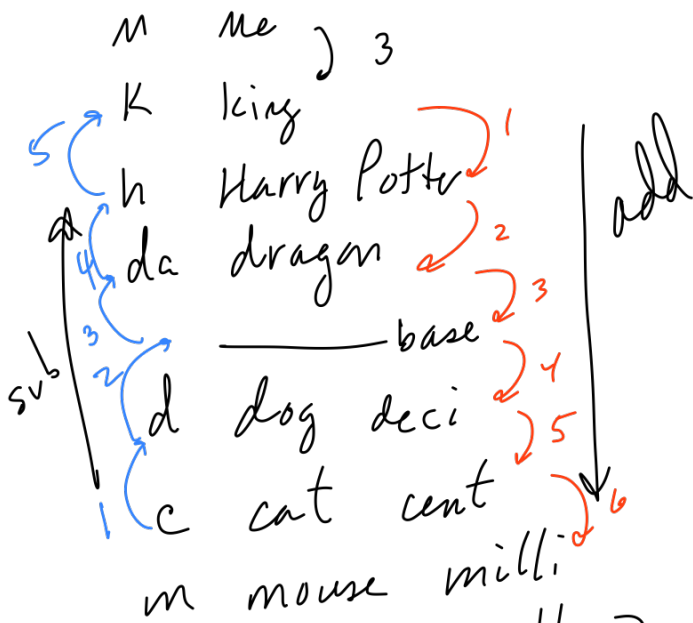
100cm = 1m

unit conversion

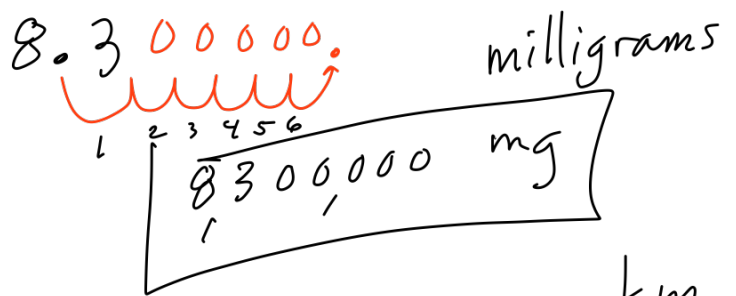
$$23\text{ m} * 1 \rightarrow \textcircled{\text{cm}}$$

23.00

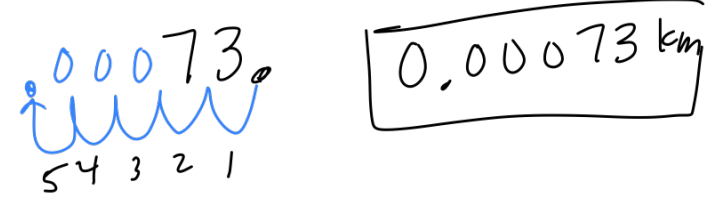
2300 cm



8.3 kg → _____ mg



73 cm → _____ km

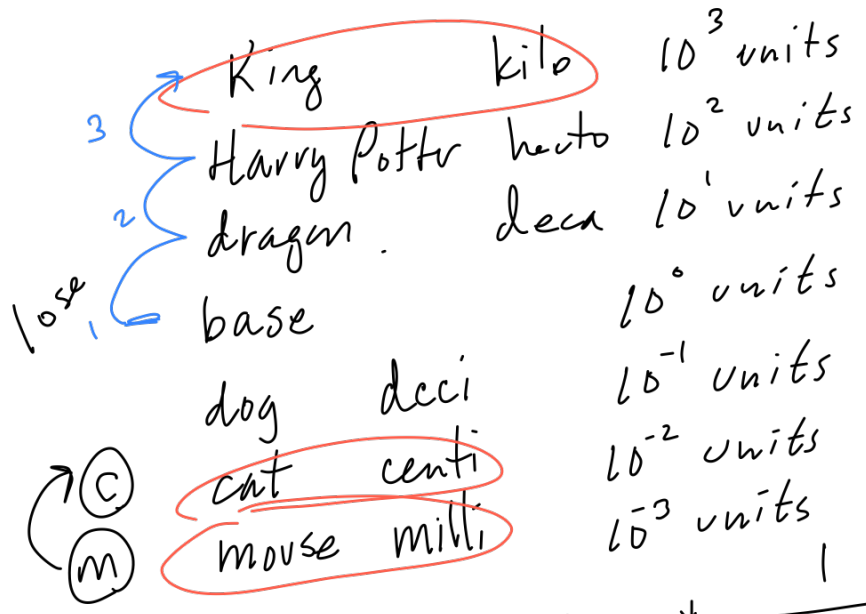


$$\left\{ 8.3 \text{ kg} * \frac{1000 \text{ g}}{1 \text{ kg}} * \frac{1000 \text{ m}}{1 \text{ g}} \right\}$$

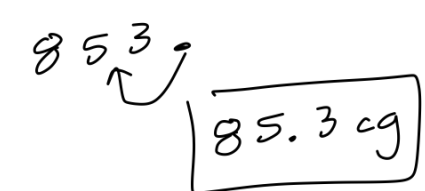
$$73 \text{ cm} * \frac{1 \text{ m}}{100 \text{ cm}} * \frac{1 \text{ km}}{1000 \text{ m}}$$

me - - -

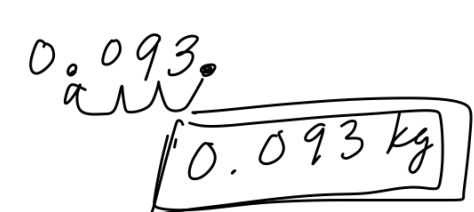
$$\frac{73}{100000} = 0.00073$$



853 mg → cg

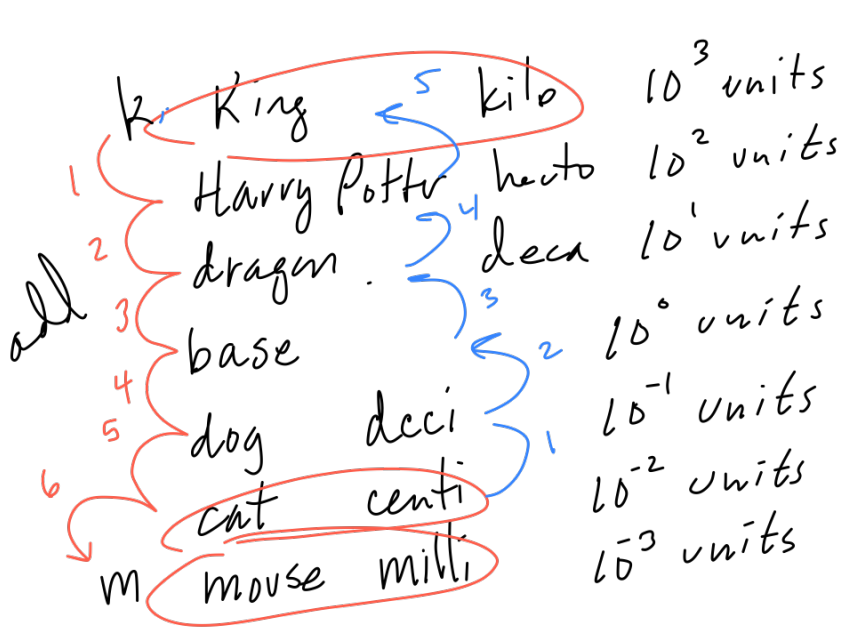


93 g → kg



$$93 \text{ g} * \frac{1 \text{ kg}}{1000 \text{ g}}$$

$$\frac{93}{1000}$$



34 kg \rightarrow mg

34.0000000

340000000 mg

853 cm \rightarrow km

0.00853

0.00853 km

- k \rightarrow kilo $\rightarrow 10^3 \rightarrow 1000$ base units
- c \rightarrow centi $\rightarrow 10^{-2} \rightarrow 0.01$ base units
- m \rightarrow milli $\rightarrow 10^{-3} \rightarrow 0.001$ base units
- M - Mega $\rightarrow 10^6 \rightarrow 1,000,000$ base units
- G - Giga $\rightarrow 10^9 \rightarrow 1,000,000,000$ base units
- d - deci $\rightarrow 10^{-1} \rightarrow 0.1$ base units

Quiz 1 due sep 23rd HW
 Online HW (Fri)
 Quiz 2
 due Sep 30th
 Sep 30th

