

## How to remember units

*Force*  $\Rightarrow$  mass  $\times$  acceleration = “Newton”

$$N = kg \times m s^{-2}$$

*Pressure*  $\Rightarrow$  Force / area = “Pascal”

$$Pa = N m^{-2} = (kg \times m s^{-2}) m^{-2} = kg m^{-1} s^{-2}$$

*Energy*  $\Rightarrow$  Force  $\times$  distance = “Joule” (the capacity to do work)

$$J = N \times m = (kg \times m s^{-2}) \times m = kg m^2 s^{-2}$$

*Power*  $\Rightarrow$  Energy / time = “Watt”

$$W = J s^{-1} = (N \times m) s^{-1} = (kg m^2 s^{-2}) s^{-1} = kg m^2 s^{-3}$$