Forces in P101

- Non-Contact ---- Gravity ($|F| = G\ m\ M/r^2$)
  - ➔ $G = 6.7 \times 10^{-11}\ m^3 / (kg\ s^2)$
  - ➔ Earth: Mass = 6×10^{24} kg, radius = 6.4×10^6 m.

- Contact (fundamentally E+M)
  - ➔ Normal: Perpendicular to surface
  - ➔ Friction: Parallel to surface
  - ➔ Anything touching the object
    - » Rope: Tension
    - » Spring F = -kx