

Cells, diffusion and absorption

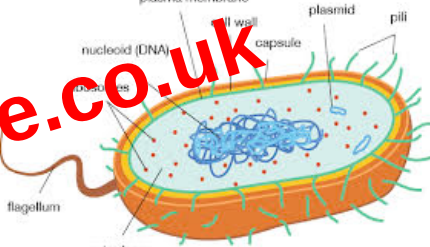
Cells

Magnification

- ⇒ Magnification – how many times the image has been enlarged.
- ⇒ Resolution – the minimum distance apart two objects have to be before they are seen as one.
- ⇒ Measurements:
 - ⇒ Units:
 - ⇒ Millimetre (mm) – 10^{-3}
 - ⇒ Micrometre (μm) – 10^{-6}
 - ⇒ Nanometre (nm) – 10^{-9}
- ⇒ Equation:

$$\text{Magnification} = \frac{\text{Measured size}}{\text{Actual size}}$$

Eukaryotic and prokaryotic cells

	Eukaryotic	Prokaryotic
Diagram		
Examples	Animal cells, plant cells and fungi	Bacteria
Differences	Organelles, membrane bound Linear chromosomes Larger ribosomes – 80S Golgi, lysosomes Plants: cellulose cell wall Mitochondria Cilia	Not membrane bound Plasmid Smaller ribosomes- 70S Absent Peptidogly – cell wall Mesosome Flagella