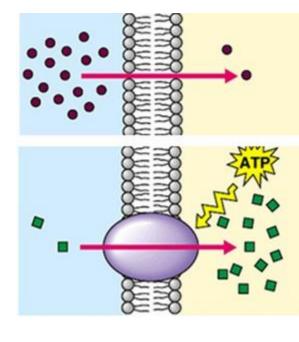
New unit: Cell Biology!

Crossing cell membranes: How do nutrients get into cells?

Cell parts: Why can plants use solar energy when we can't?





Genes & heredity: Why are my eyes blue?

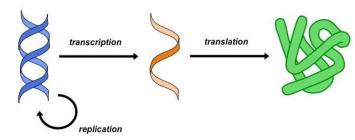


Genotype=bb

Genotype = Bb or BB

Genes to proteins:

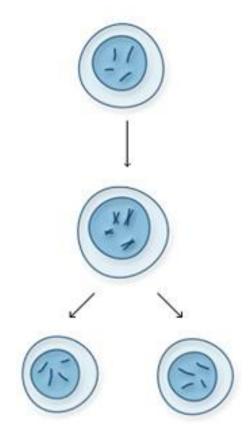
What exactly does a gene DO?



Images: S. Freeman et al. (2014); Pearson Education; ib.bioninja.com.au; original source unknown (eye color)

Semi-review: Cells

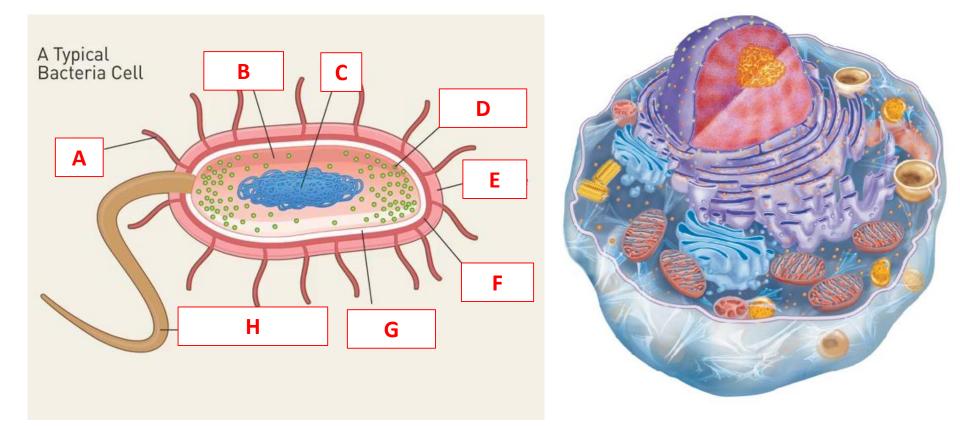
"Cell Theory" – 3 parts



 Musical Version (by Jeramey Tamez): <u>https://www.youtube.com/watch?v=ovjfNBSIOc4</u>

Image: https://ghr.nlm.nih.gov/primer/howgeneswork/cellsdivide (National Library of Medicine)

Bacterial cells vs. plant/animal cells



Images: modified from https://vimeo.com/16430609 (original source unknown); Figure 7.6 of *Biological Science* (2014) by S. Freeman et al.

Service Dog



Human Insulin

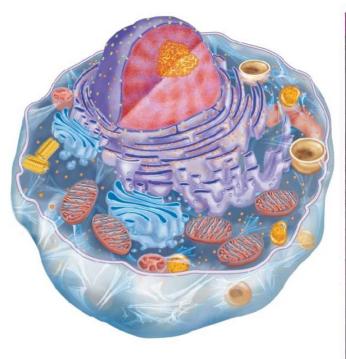


Organelles



brookslabradors.com; wisegeekhealth.com; Figure 7.6 of Biological Science (2014) by S. Freeman et al.

Today's focus: cell parts (organelles)



Nucleus	Mitochondria
Ribosome	Chloroplast
Endoplasmic reticulum	Vacuole
Golgi complex	Lysosome

Image: Figure 7.6 of Biological Science (2014) by S. Freeman et al.; Table 1.1 of Cells, Heredity, and Classification (2005) by Holt

How is a cell that produces protein hormones (insulin, for example) like a manufacturing plant?