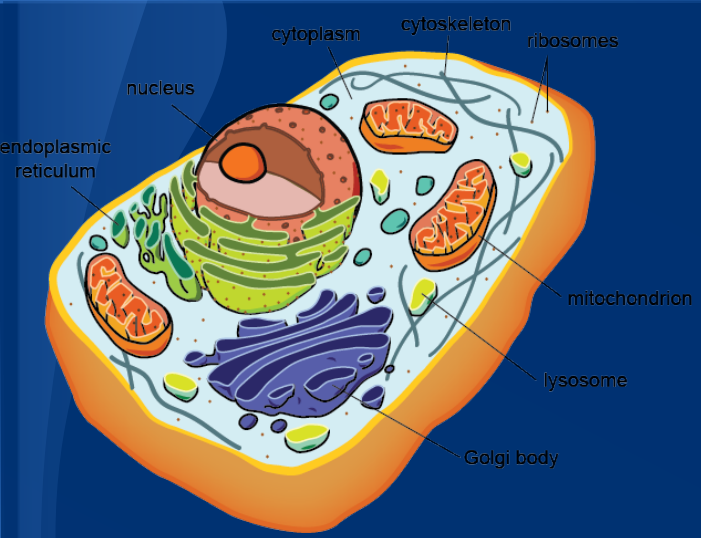


Life of a Cell

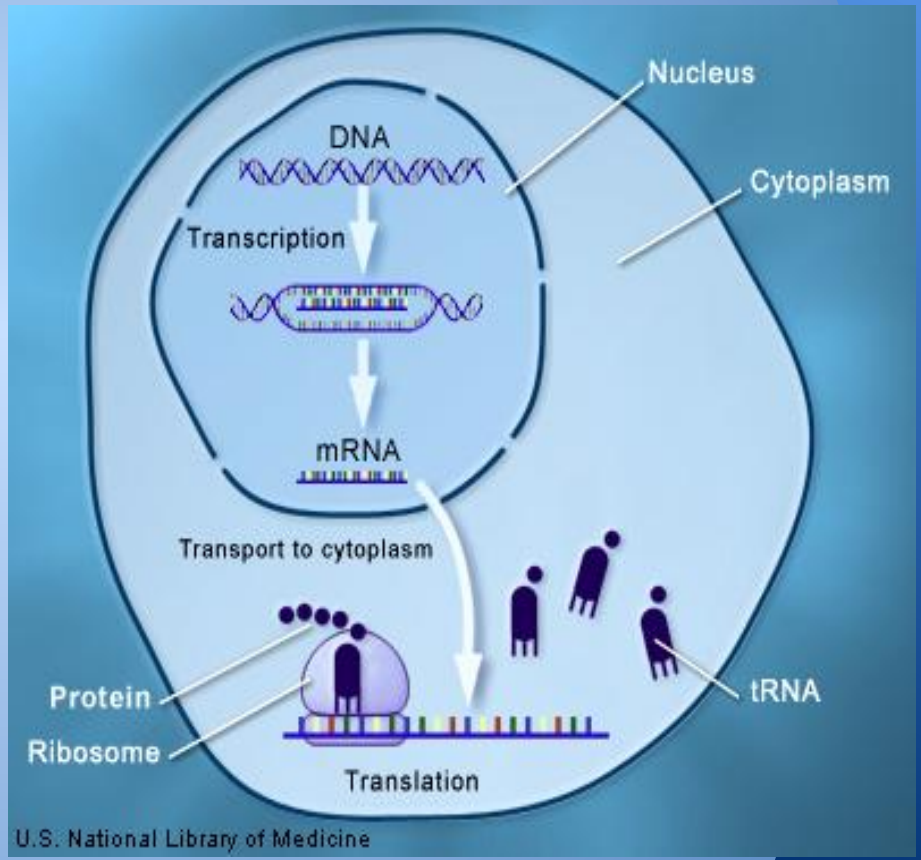
Hikma Salhe, Kara Rosenberg, Alex Colon

Abstract

This portfolio helped in strengthening our understanding of cells. While we knew basic information relating to cells, we were able to blossom our knowledge. This project was a great experience .

Movement

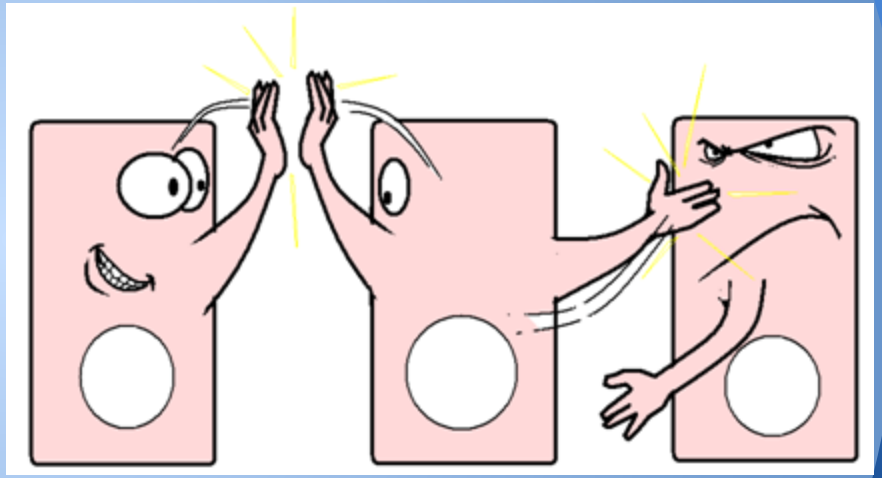
- Unicellular organisms move in order to find food.
- Involves: cross-linking, bundling, adhesion, etc.



Communication

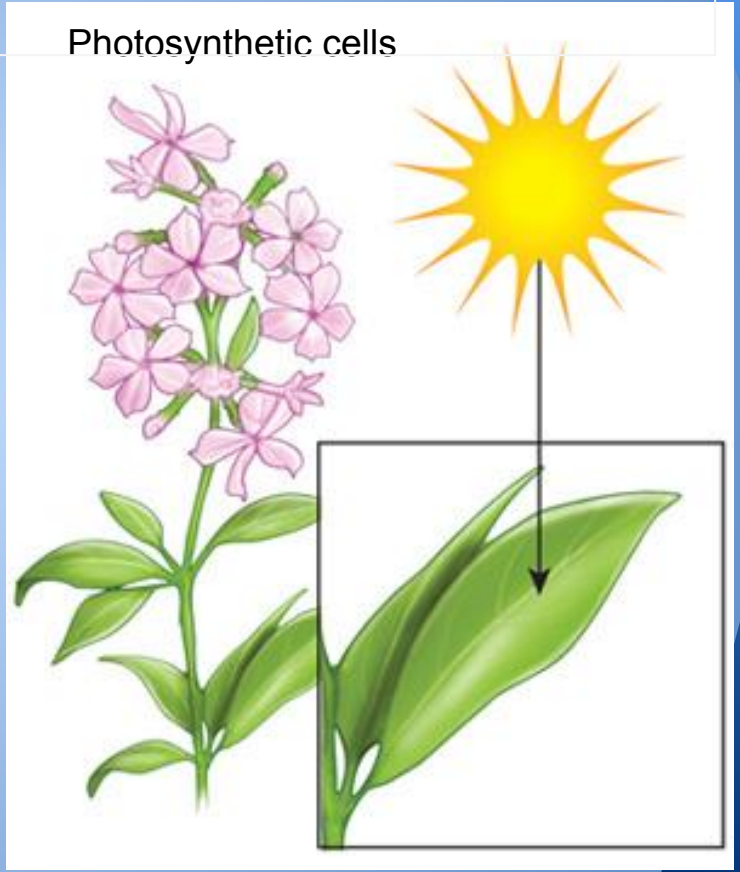
Cells communicate in 4 ways:

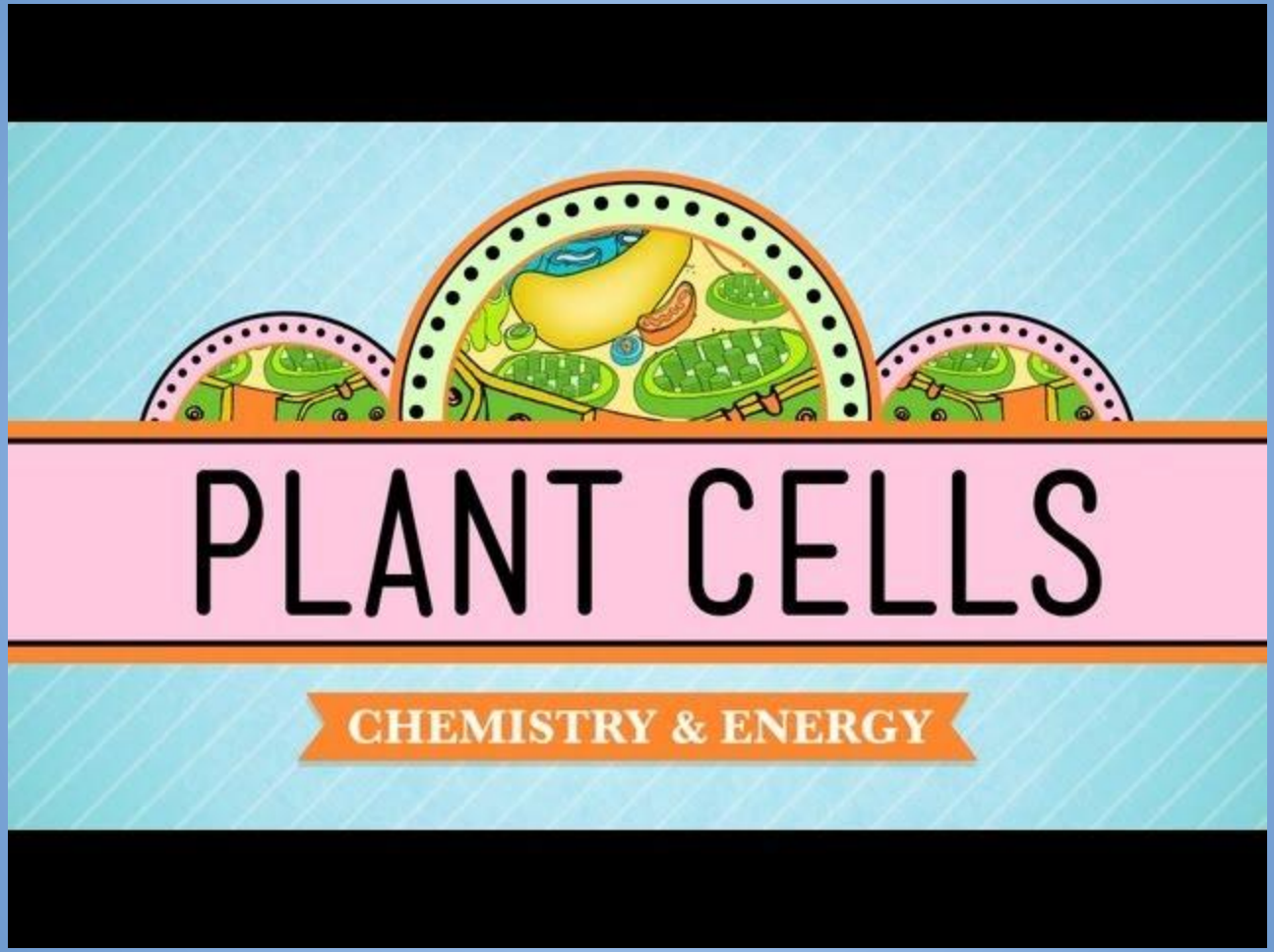
- Direct contact
- Short-range signals
- Long-range signals
- Chemical and electric signals



Food

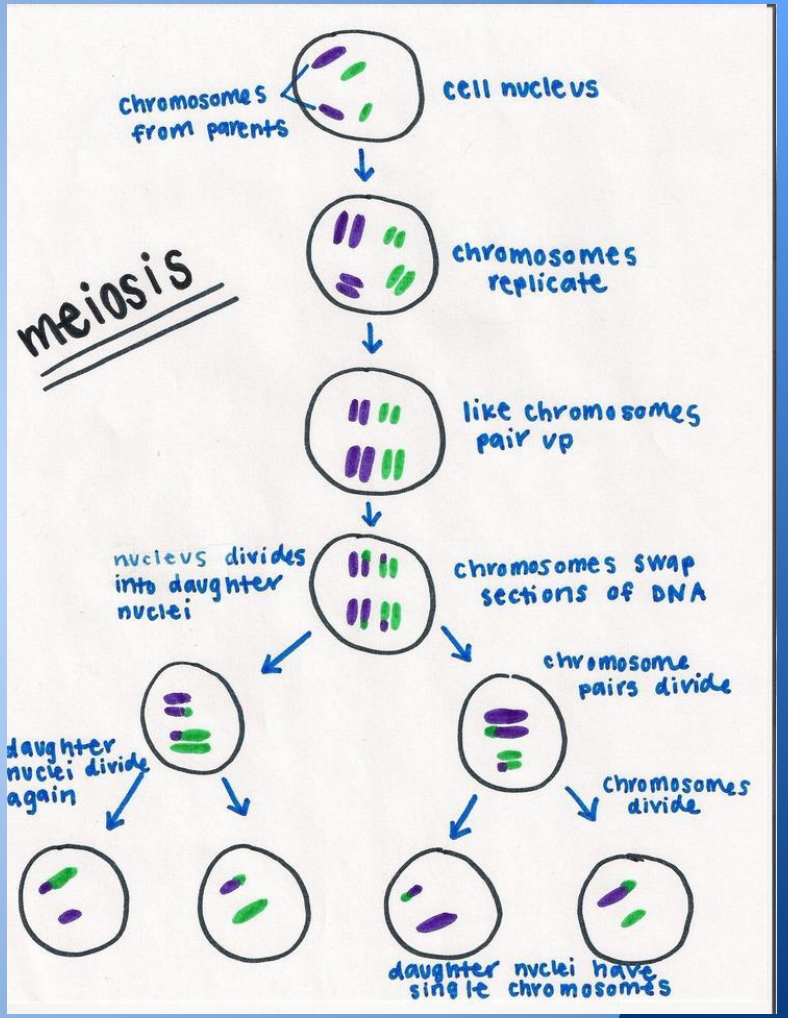
- Passive transport
  - osmosis/diffusion
- Active transport
  - endocytosis
  - phagocytosis
  - pinocytosis
  - exocitosis




PLANT CELLS
CHEMISTRY & ENERGY

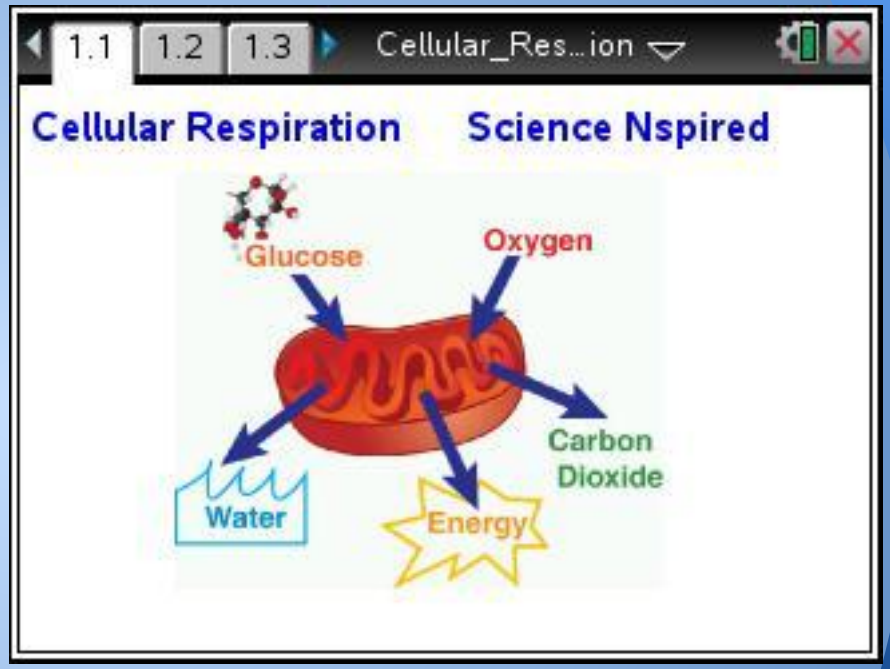
Reproduction

- Meiosis has two parts
  - Meiosis I is a crossing over of genes
  - Meiosis II remaining DNA begins to condense

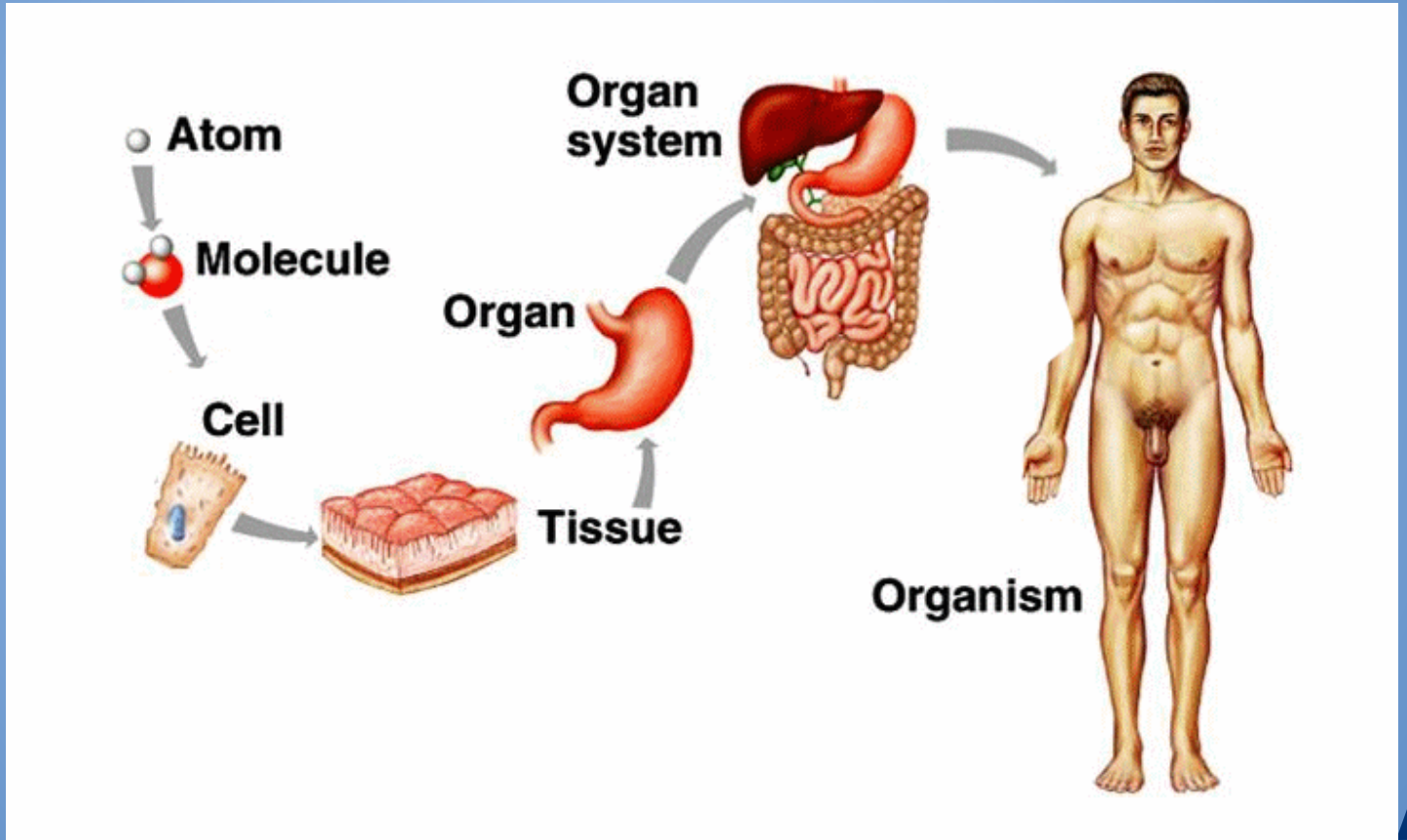


Respiration

- The process of which the chemical process of food molecules is formed into ATP
- All living cells must carry out cellular respiration



Organization

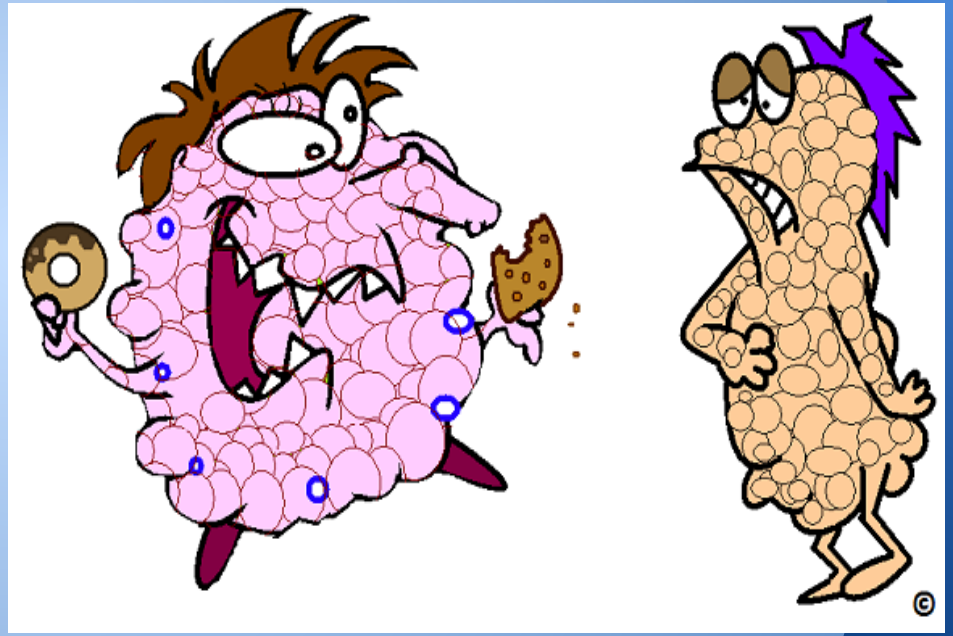


Organization

- DNA transcription to RNA which translates to Proteins
- Translation-when the code make amino acids come together

Growth

- Cells first grow then divide.
- Cells grow by adding materials to their cell membrane and walls, if available

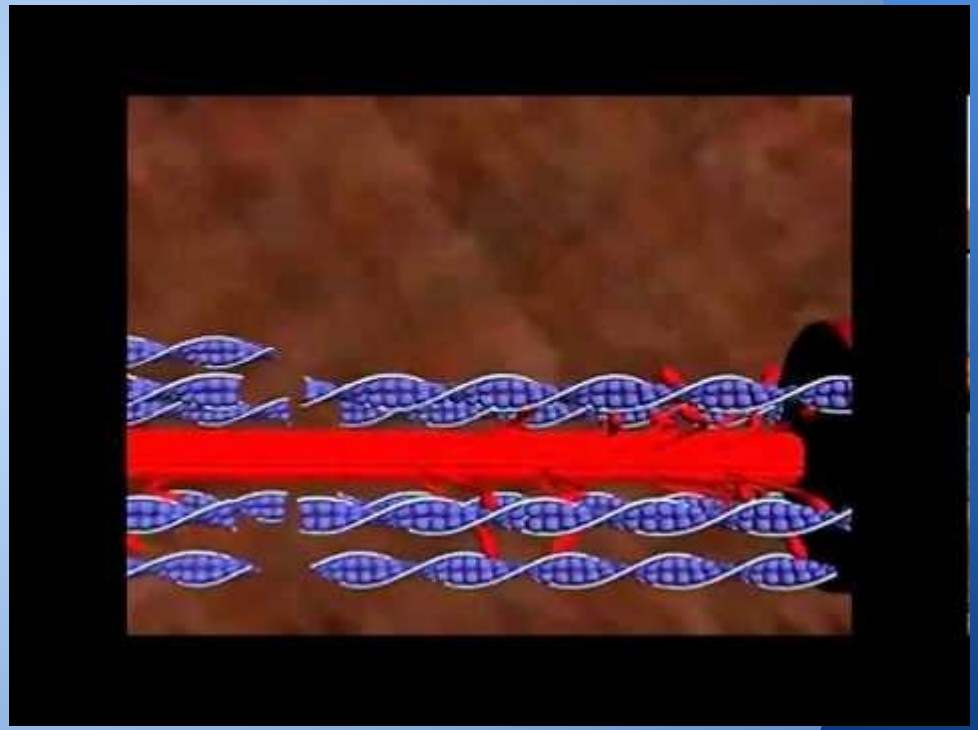


Stimulus

- Anything that provokes an operating reaction an organ or tissue
- Can have an impact on an organism

Muscle Contraction

- Cardiac & Smooth
- Muscle fiber gets tension during actin and myosin



Immune Response

- System of biological structures within an organism that protects against diseases.
- Cough reflex
- Enzymes in tears and skin oils
- Mucus
- Stomach acid
- Skin

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