Plant cell Differentiation and specialization

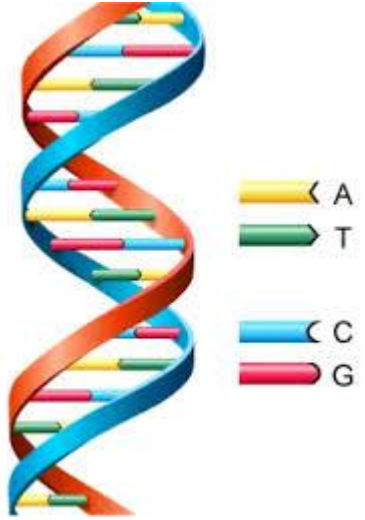
CELLULAR REPRODUCTION

How do cells reproduce?

- The cell receives instructions from **DNA**
- DNA= **D**eoxyribo**n**ucleic **A**cid
  - THE INSTRUCTIONS FOR THE CELL!

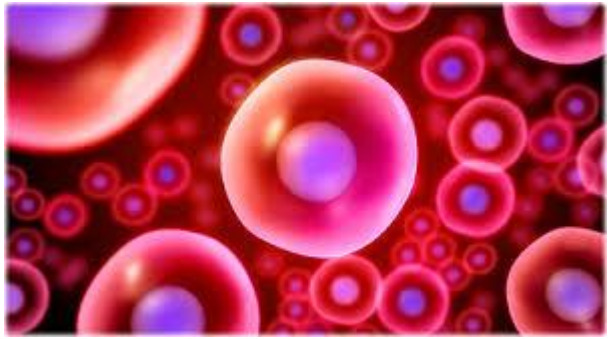
Cell Differentiation and Specialization

1) Nearly all cells in our body have the same DNA.



Cell Differentiation and Specialization

2) Cells start as an undifferentiated group of cells called stem cells



Cell Differentiation and Specialization

3) Variation in DNA activity leads to cell differentiation

Cell Differentiation and Specialization

4) Cell differentiation leads to specialization

Cell Differentiation and Specialization

5) This means that the cell can become any type of cell that the body needs!

Cell Differentiation and Specialization

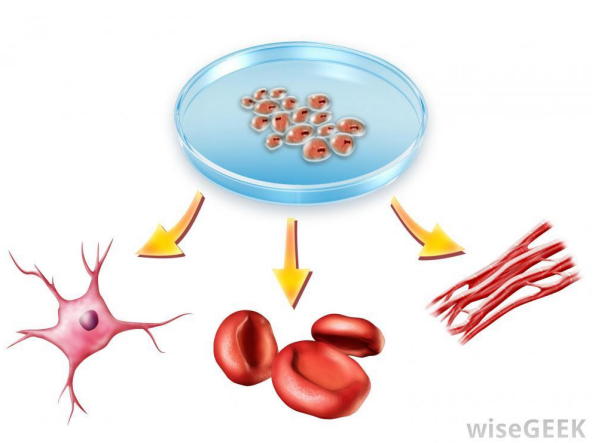
6) Example: A cell can become a muscle cell or a red blood cell!

Plant cell Differentiation & specialization

Differentiation- **cells change to perform a specific function**

Specialization- **this specific function that the cell performs**

- Why? To help another tissue or organ



Cell Differentiation & Specialization

The plant cells undergo differentiation and specialization to produce cells with special functions