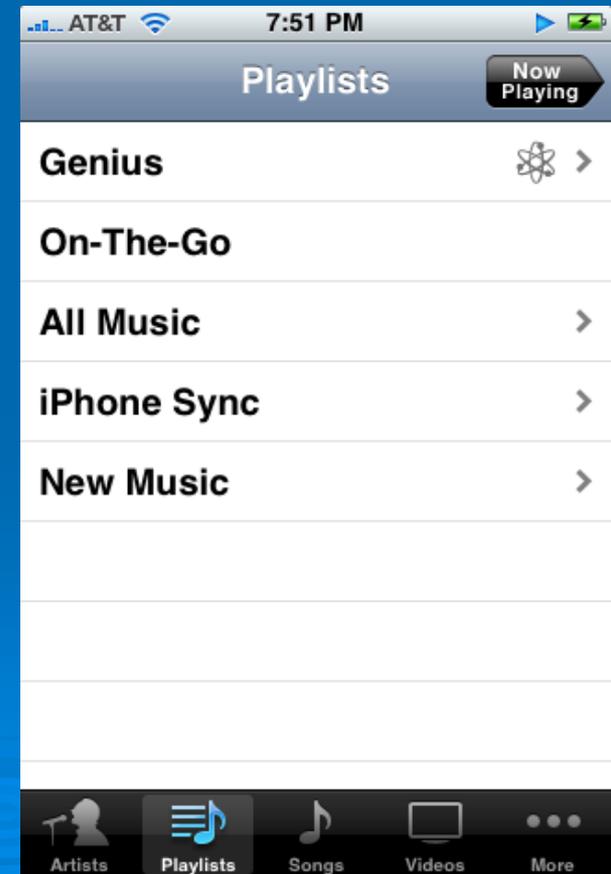


Levels of Organization

SONGS



Division of Labor & The First Level

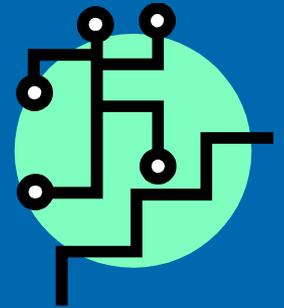
Within living things, there are divisions of labor.

Division of labor means that the work (labor) of keeping the organism alive is divided (division) among different parts.

Each part has a job to do and as each part does its special job, it works in harmony with all the other parts. THE JOB OF THE SMALLEST THING BUILDS ON THE NEXT LEVEL!

Just like stair steps...

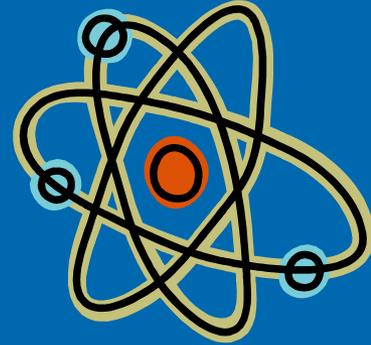
There are different LEVELS to how one living thing is made, as well as where it fits into this world.



The arrangement of specialized parts within a living thing is sometimes referred to as levels of organization.

We will discuss the levels from least complex to most complex!

1. ATOMS



The smallest **NON-LIVING** unit to build a living thing.

Atoms are made of matter

ATOMS make up ELEMENTS you are used to hearing about. Like CARBON, HYDROGEN AND OXYGEN

A group of **ATOMS** put together are called **MOLECULES...**

Atoms work together to form small parts, called

2. ORGANELLES

Organelles are small parts that do different jobs for the cell (small organs)

Example - nucleus

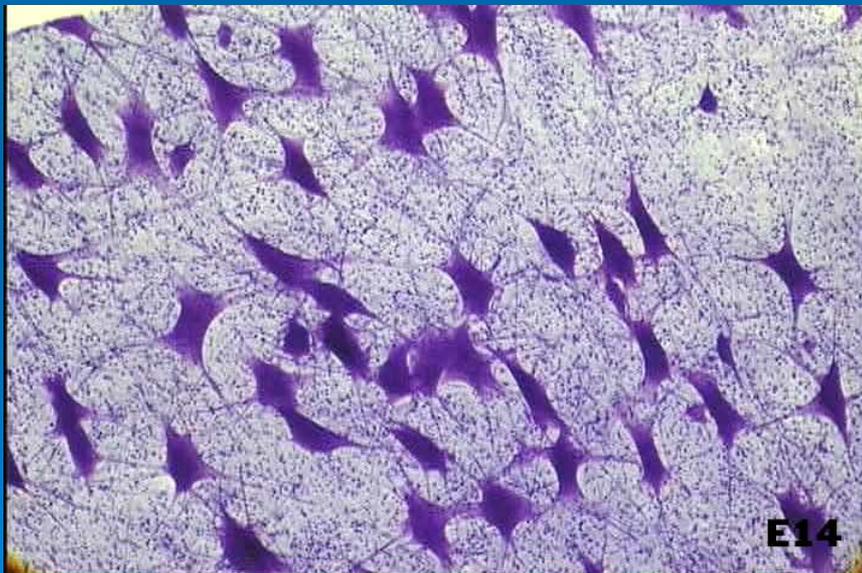


Organelles are parts of the

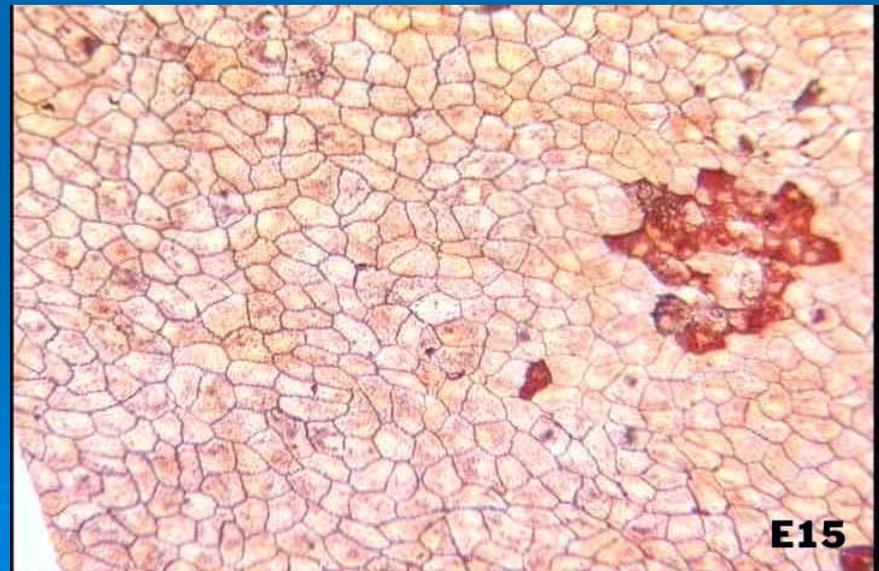
3. CELL

The Cell is the building block of ALL living things. This is the level where LIFE begins!

There are LOTS of Different Kinds of cells.
Here are two examples. Can you guess what kind?



Nerve Cells



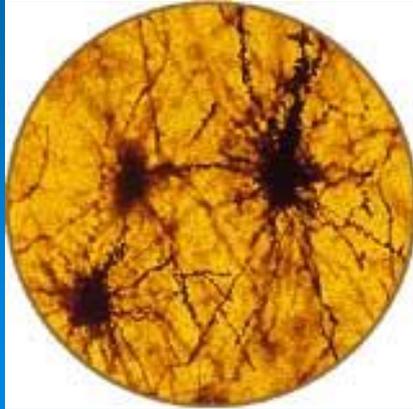
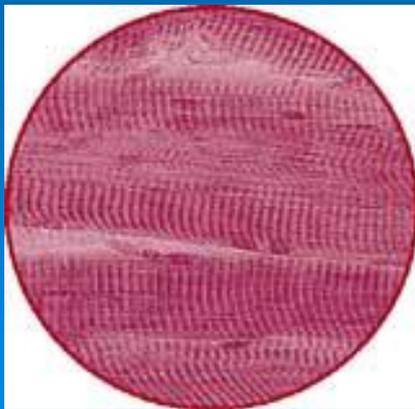
Skin Cells

4. Tissues

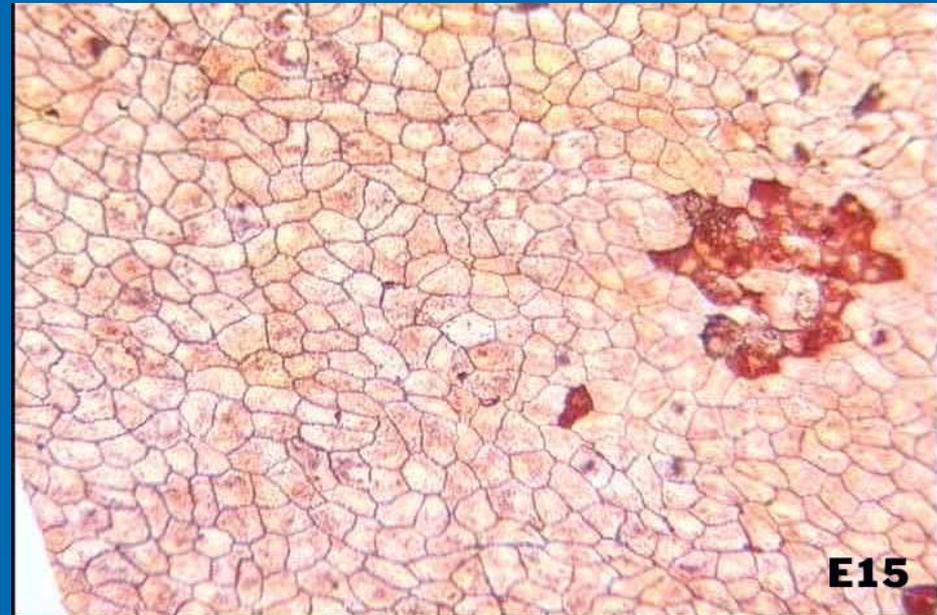
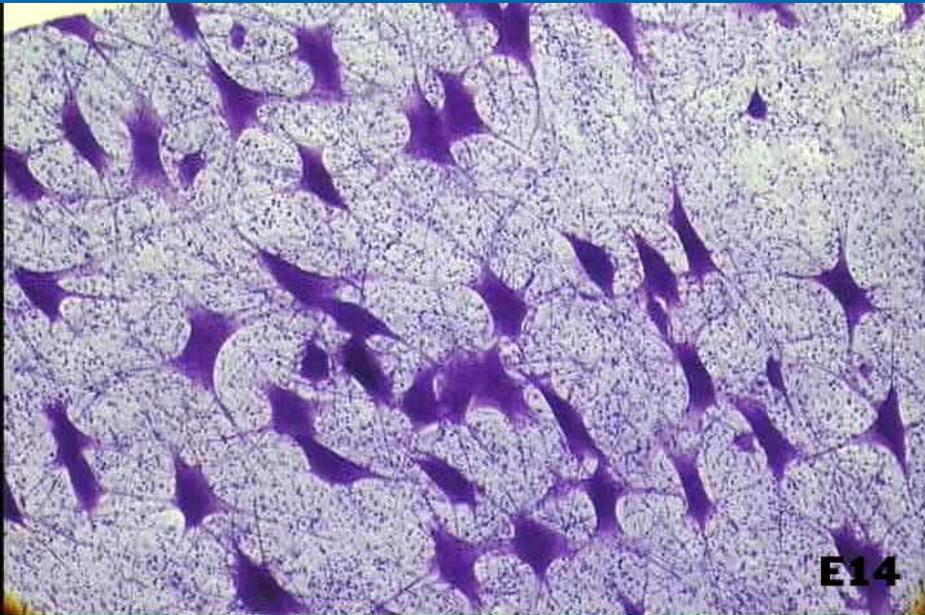
In any multi-cellular organism, cells rarely work alone. Cells that are similar in structure and function are usually joined together to form tissues.

Cell + Cell = Tissue

This applies to all living things... plants too!



Let's Look Again...

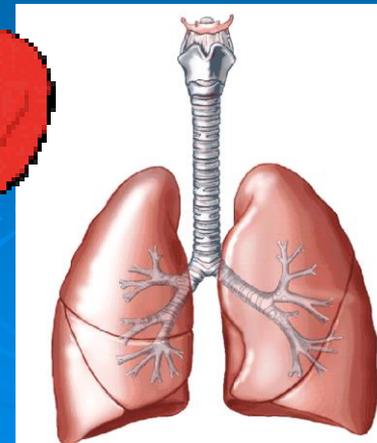
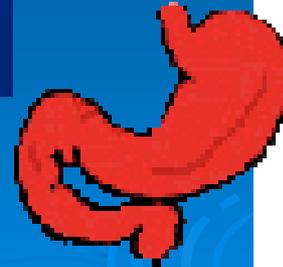


Here are the cells we saw before, but if you look closely, you can see that they all look similar. Nerve cells working together make nerve tissue, and skin cells make up a special type of epithelial tissue.

Plants have tissue too!

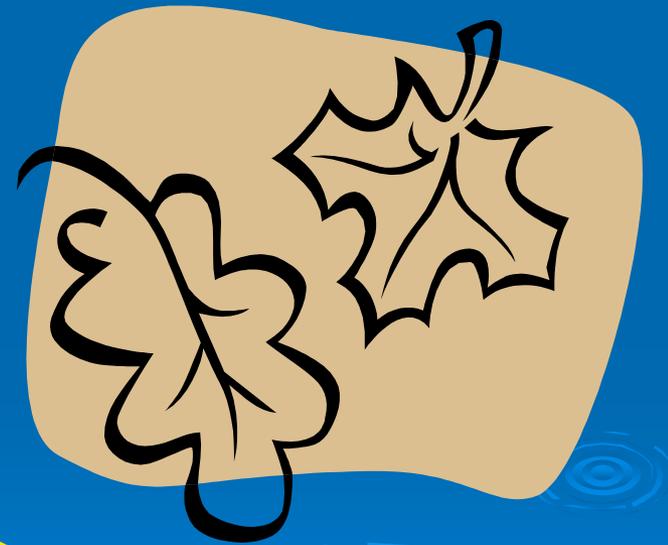
5. Organs

When a bunch of different types of tissues work together, they form an organ. There are many organs in the body. How many can you name??



Plants have organs too!

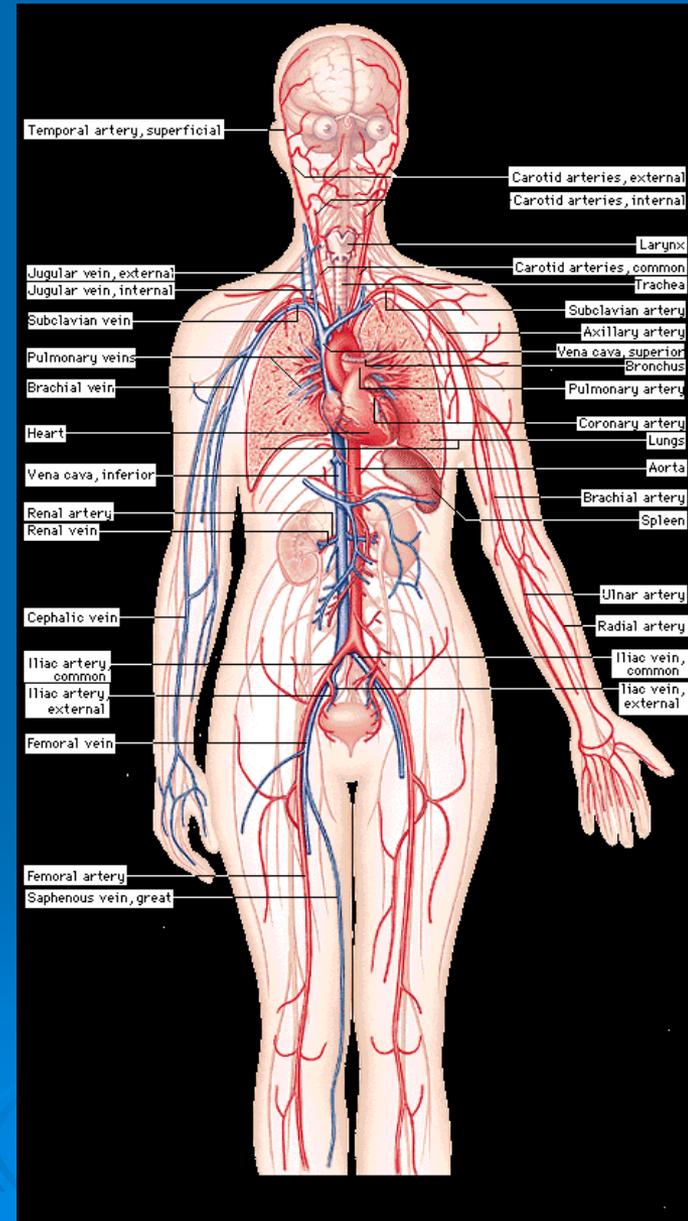
LEAVES, STEMS, ROOTS...!!!!



6. Organ Systems

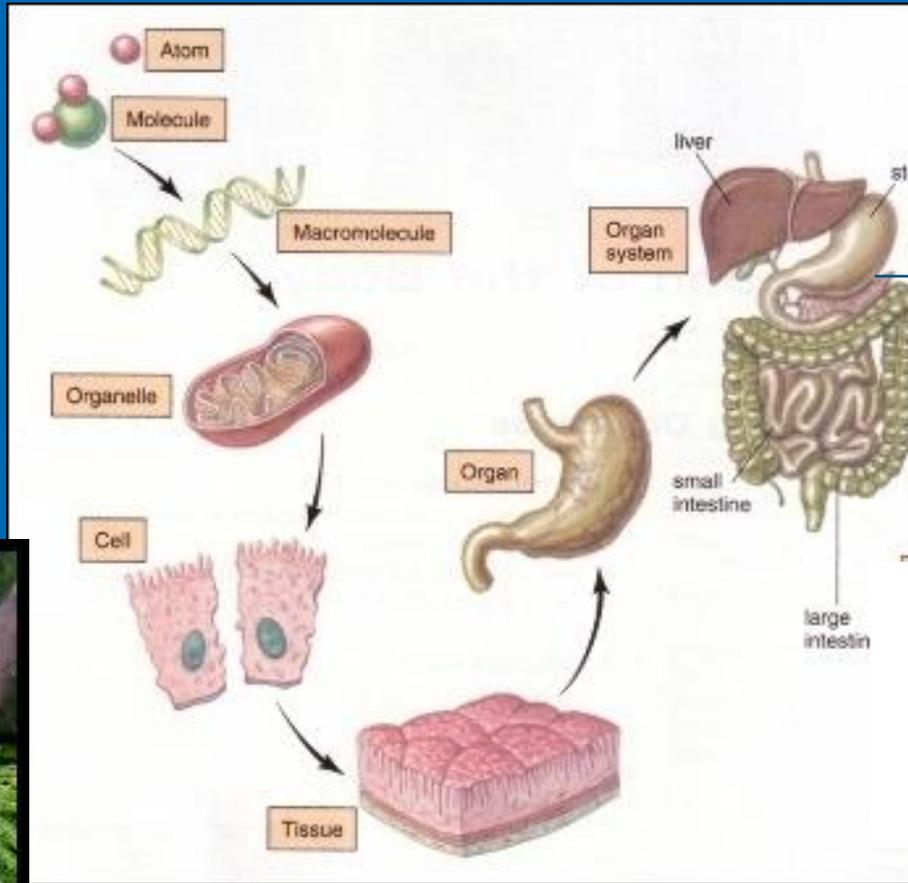
Each organ in your body is part of an organ system: a group of organs that work together to perform a major function.

For example, your heart is part of your circulatory system, which carries oxygen and other materials throughout your body. Besides the heart, blood vessels are organs that work in your circulatory system.



7. ORGANISM

an entire living thing (can even be unicellular)



Humans, plants, animals, and microorganisms like bacteria



➤ <https://www.youtube.com/watch?v=EtWknf1gzKo>