



Subject: Biology
Title: Levels of Organisation (*cell-tissue-organ-organ system-organism*)
Ages: 15-16

Description

This infographic presents the levels of organization of multicellular organisms. Each level is accompanied by a basic description and is followed by a picture with a related link.

Objectives

After the completion of this lesson, students will be able to:

- Name the five levels of organization (cell-tissue-organ-organ system-organism).
- Order the levels of organization (smaller to bigger).
- Describe the key points of each level of organization.

Activities

1. **Cell:** Students have to read the names of the main organelles of the cell, point out the differences between eukaryotic and prokaryotic cells and watch the animated video of the structure of the cell.
2. **Tissue:** Students have to observe the images of the different tissues and discuss the differences and the similarities they see. The teacher presents them with the relative scale of some structures and they discuss the size of each structure and its role in the conservation of life.
3. **Organ:** The teacher asks students to name different organs and their function. Students watch the video about the 3D printed organs. The teacher asks students to think about the implementation of technology in medicine.
4. **Organ systems:** The teacher asks students to name different organ systems. Students have to explore what different organ systems look like through the simulation link.
5. **Organism:** The teacher ask students to think about other organisms like humans, that have the same levels of organization. Students may visit an art exhibition about the body.

Projects

As a follow up project, students may:

- Investigate how different organ systems work together in order to keep organisms healthy.
- Choose an organ system and make a model using different materials.
- Make a timeline of the different perceptions about the body in medicine.

Curators

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