

Unit 1: Levels of Organization

Week 1: Fearfully and Wonderfully Made

Date _____

Lesson 1: God created you amazingly!

Listen to <https://www.icr.org/article/amazing-human-body/>. (It is about 13 minutes.)

Read “The Human Body—God’s Masterpiece” found here: <https://creation.com/the-human-body-gods-masterpiece>.

Lesson 2

Read: Psalm 139:13-16, NKJV

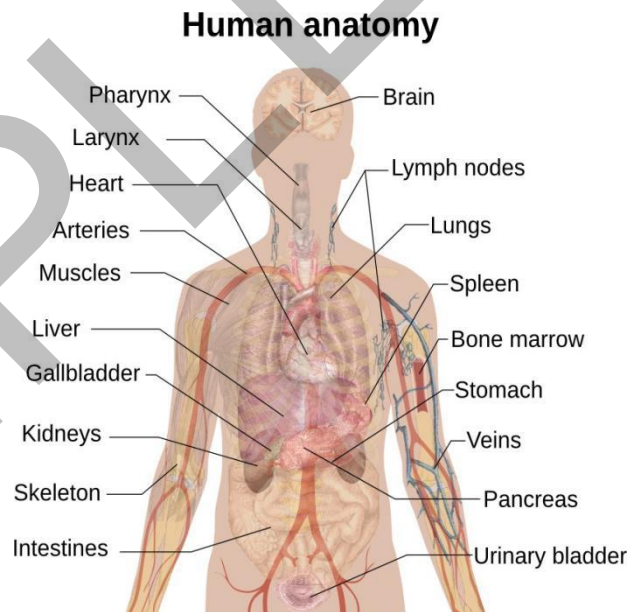
13 For You formed my inward parts (organs);
You covered me in my mother’s womb (organ).

14 I will praise You, for I am fearfully *and*
wonderfully made;

Marvelous are Your works,
And *that* my soul knows very well.

15 My frame (system) was not hidden from You,
When I was made in secret,
And skillfully wrought in the lowest parts of the earth.

16 Your eyes saw my substance, being yet unformed.
And in Your book they all were written,
The days fashioned for me,
When *as yet there were* none of them.



Respond to the following in your notebook:

- What does God say about your body in this psalm?
- What systems(s) of the body do you see in the scriptures above?

Lesson 3: From Big to Small, God Made It All

Our universe is unbelievably immense. Can you count the stars in the heavens or the grains of sand on the beach? Mr. Sherwin directs our eyes to the skies—and the submicroscopic world around us—to inspire wonder and worship of our awesome, majestic Creator.

Listen: <https://www.icr.org/article/from-big-to-small-god-made-it-all>

Read Psalm 8. Here we read David’s praise of God in regard to the works of His hand.

Week 2: What Is Anatomy & Physiology?

Date _____

Lesson 1

Read and take notes on pages 7–9 in *Anatomy and Physiology*. (textbook page numbers, not PDF page numbers)

Read an introduction to anatomy: <https://www.worldbookonline.com/advanced/article?id=ar020300&st=anatomy#tab=homepage>

Read an introduction to physiology: <https://www.worldbookonline.com/advanced/article?id=ar428660&st=physiology#tab=homepage>

Read this World Book article about the human body, stopping at “What the body is made of.” <https://www.worldbookonline.com/student-new/#/article/home/266440>

Lesson 2

Define the following terms and place them in your notebook. Learn the terms and have someone else quiz you.

- Anatomy
- Gross anatomy
- Homeostasis
- Microscopic anatomy
- Physiology
- Regional anatomy
- Systemic anatomy



Watch “Leonardo da Vinci: Anatomist” (https://www.youtube.com/watch?v=SdxEF51kY_4)

Read about Andreas Vesalius in this World Book article: <https://www.worldbookonline.com/student-new/#/article/home/ar584100/Andreas%20Vesalius>

Watch the video about Real Bodies, an exhibition that can be found at various science centers around the US: <https://www.imagineexhibitions.com/exhibitions/real-bodies>.

Lesson 3

Complete:

- Review Questions: 6 and 7 on page 37.
- Critical-Thinking Questions: 28 on page 39

1.2 Structural Organization of the Human Body

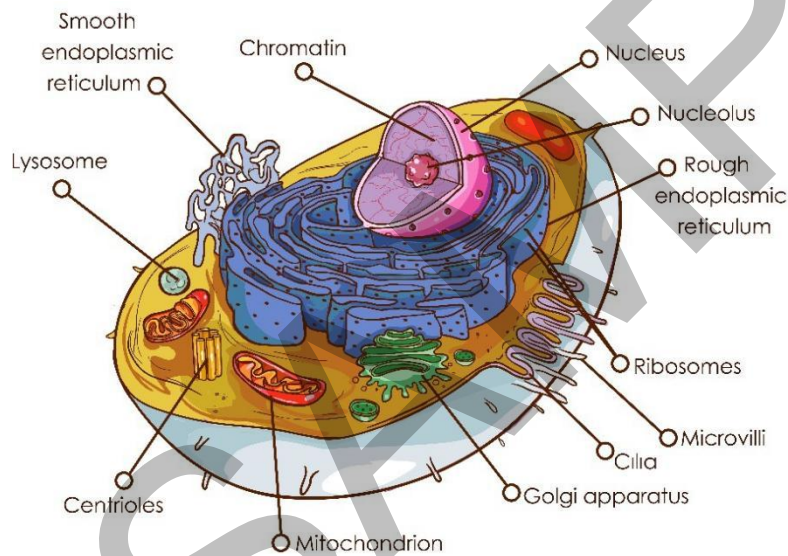
Lesson 1

This week we will focus on the basic architecture of the body. Consider the architecture of a building. It is made of individual components that come together to form a larger structure. This is the same with the human body. Simple levels of organization increase in complexity.

Read Section 1.2, pp. 9–14 of the textbook.

Review Figure 1.3 on page 10. The smallest component is an element. These become compounds, which then become cells. The cells combine to form tissues. A number of tissues together form organs. A group of organs comprise an organ system.

Though you may have learned about the cell in previous science classes, let's spend a little bit of time reviewing.



Watch this video and define the function of each of the component parts of the animal cell. Biology: Cell Structure (<https://www.youtube.com/watch?v=URUJD5NEXC8>)

Create your own, if you have time. Have fun with this. Use the websites below as a guide, or design your own.

<https://sciencing.com/make-easy-animal-cell-model-6225563.html>

<https://owlcation.com/stem/3d-cell-model>

Lesson 2

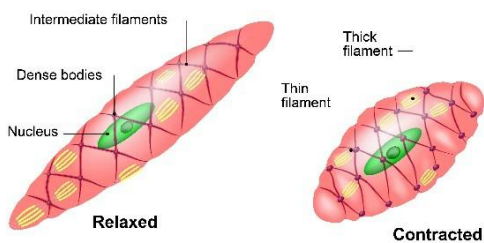
Now that you've reviewed cells, let's move on to tissue. One type of tissue is muscle tissue. The human body consists of three different types of muscle: skeletal, cardiac, and smooth. Find an image online and draw and label the three types of muscles. Answer the following questions: Where is each found? What is its function? How does it work?

<https://www.youtube.com/watch?v=PJDrR3sZPZU>

<https://www.youtube.com/watch?v=C85TbgoAiiY>

<https://www.toppr.com/guides/biology/locomotion-and-movement/muscle/> (text, not video)

This is an example of a smooth muscle cell:



Watch “Tissues, Part 1: Crash Course A&P #2” <https://www.youtube.com/watch?v=i5tR3csCWYo> and “Body Tissues | Four Types” <https://www.youtube.com/watch?v=S4jWaLUhXaY> (Be sure you are fine with the t-shirt he is wearing before having your child watch the video.)

Lesson 3

Answer Review Questions 8, 9, and 10 and Critical-Thinking Question 30 on pp. 38 and 39 in the text and write the answers in your notebook.

Define the following terms and place in your notebook. Learn the terms and have someone else quiz you.

- Cell
- Organ
- Organ system
- Organism
- Tissue