

Remote Learning Packet

Please submit scans of written work in Google Classroom at the end of the week.

Week 7: May 11-15, 2020

Course: 9 Biology

Teacher(s): Mr. Malpiedi michael.malpiedi@greatheartsirving.org

Ms. Oostindie megan.oostindie@greatheartsirving.org

Weekly Plan:

Monday, May 11

Complete the skeletomuscular system worksheet

Tuesday, May 12

Complete the circulatory and respiratory system worksheet

Wednesday, May 13

Read and annotate the attached selection on the significance of the heart.

View the video on the significance of the heart.

Thursday, May 14

Complete the endocrine systems worksheet.

View the video on hormone patterns in the body

Friday, May 15

Attend office hours

Catch-up or review the week's work

Statement of Academic Honesty

I affirm that the work completed from the packet is mine and that I completed it independently.

I affirm that, to the best of my knowledge, my child completed this work independently

Student Signature

Parent Signature

Monday, May 11

Complete the *muscular and skeletal system worksheets* using your textbook as a guide. The page numbers listed will be crucial for you to complete the worksheets *but do not take notes on these pages*. Use the worksheets to find and record the most important information from these sections. Be sure to upload your completed worksheet as part of your packet upload this week.

Tuesday, May 12

Complete the *cardiovascular and respiratory system worksheets* using your textbook as a guide. The page numbers listed will be crucial for you to complete the worksheets *but do not take notes on these pages*. Use the worksheets to find and record the most important information from these sections. Be sure to upload your completed worksheet as part of your packet upload this week.

Wednesday, May 13

Read My Heart Leaps Up by Wordsworth aloud carefully. Repeat two more times - enjoy it!
Watch the video “The Significance of the Heart” on Google Classroom related to details of the heart.

Thursday, May 14

Complete the *endocrine worksheet* using your textbook as a guide. The page numbers listed will be crucial for you to complete the worksheets *but do not take notes on these pages*. Use the worksheets to find and record the most important information from these sections. Be sure to upload your completed worksheet as part of your packet upload this week.

Watch the video “Hormone Cycles” on Google Classroom related to hormone patterns in the human body.

Friday, May 15

Use this day to attend office hours, catch up on work from this week, scan your documents, and enjoy the start of your weekend! *You do not need to include notes in your packet submission*, only the documents listed: skeletal system worksheet, muscular system worksheet, cardiovascular system worksheet, respiratory system worksheet, endocrine system worksheet.

Muscular System

Directions: Using the provided pages in your textbook to answer the following questions in complete sentences or fill in the blanks.

Structure (pp.919, 921-922)

1. Skeletal muscles are made of strands called _____.
2. Each one of those strands is made of protein filaments called _____.
3. The thicker kind of protein filament is called _____. The thinner kind is called _____.
4. The tough tissue that connects muscle to bone is _____.
5. Muscles require lots of energy. Therefore, muscle cells usually contain many of which organelle? _____.

Function (pp. 918-919, 921-922)

6. Which kind of muscle tissue is activated when lifting a sack of flour? _____.
7. Which kind of muscle tissue helps move waste along the digestive tract? _____.
8. How do muscles allow for movement of the body?
_____.
9. Why does strenuous activity cause oxygen debt? What is the result?

10. Do muscles push? Do they pull? What do they do?

11. Using the anatomy on p. 917 (and your own experience), list the muscles involved in a pushup.
Why do we call this a “push” motion?

On the Heart

Read the Wordsworth poem three times aloud. Take your time, and enjoy the work. Once you have done so, head over to Google Classroom and watch the video “The Significance of the Heart.”

My Heart Leaps Up

BY WILLIAM WORDSWORTH

My heart leaps up when I behold
A rainbow in the sky:
So was it when my life began;
So is it now I am a man;
So be it when I shall grow old,
Or let me die!
The Child is father of the Man;
And I could wish my days to be
Bound each to each by natural piety.

Here is a delightful optional extra bonus poem that further exemplifies the relationship of the heart with soul and being:

A Birthday

BY CHRISTINA ROSSETTI

My heart is like a singing bird
Whose nest is in a water'd shoot;
My heart is like an apple-tree
Whose boughs are bent with thickset fruit;
My heart is like a rainbow shell
That paddles in a halcyon sea;
My heart is gladder than all these
Because my love is come to me.

Raise me a dais of silk and down;
Hang it with vair and purple dyes;
Carve it in doves and pomegranates,
And peacocks with a hundred eyes;
Work it in gold and silver grapes,
In leaves and silver fleurs-de-lys;
Because the birthday of my life
Is come, my love is come to me.

Cardiovascular System

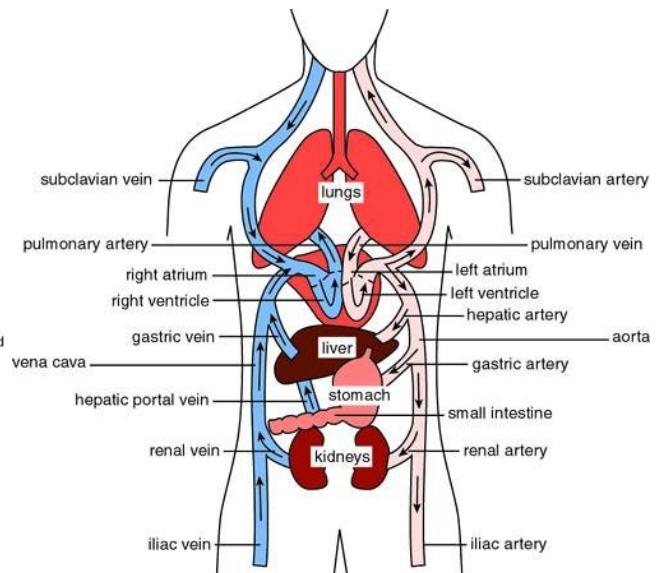
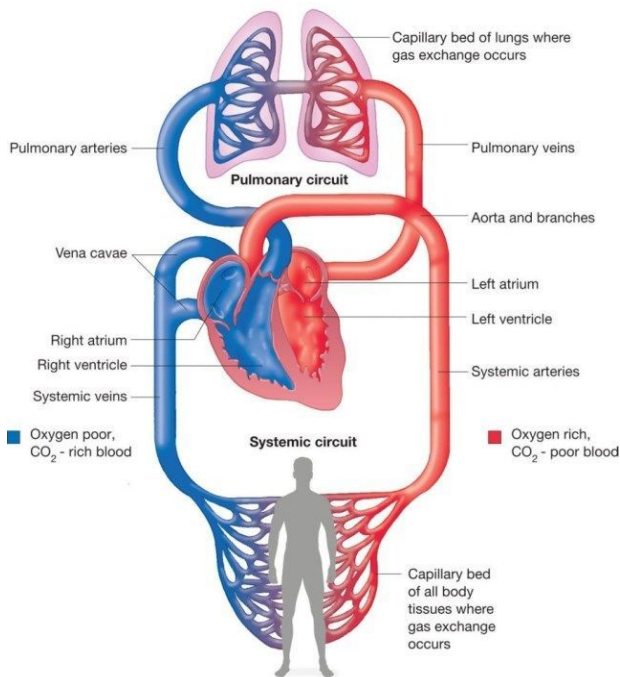
Directions: Using the provided charts and pages in your textbook to answer the following questions in complete sentences or fill in the blanks.

Structure (pp. 933, 936-937)

1. What is the main organ of the cardiovascular system? _____
2. The second major component of the cardiovascular system are _____.
3. _____ are the blood vessels that carry blood *away* from the heart.
4. _____ are the blood vessels that carry blood *to* the heart.
5. _____ are the blood vessels whose walls are thin enough for gases and nutrients to diffuse across through the wall.

Function (pp. 940-941)

6. _____ is the component of blood that carries nutrients and metabolites to cells.
7. Red blood cells are responsible for the transport of _____ to all parts of the body.
8. _____ defend the body against disease by engulfing invading pathogens using phagocytosis.



9. Why must the blood pass through the pulmonary circuit before it is pumped to the body tissues?

10. What regions of the body does the circulatory system affect?

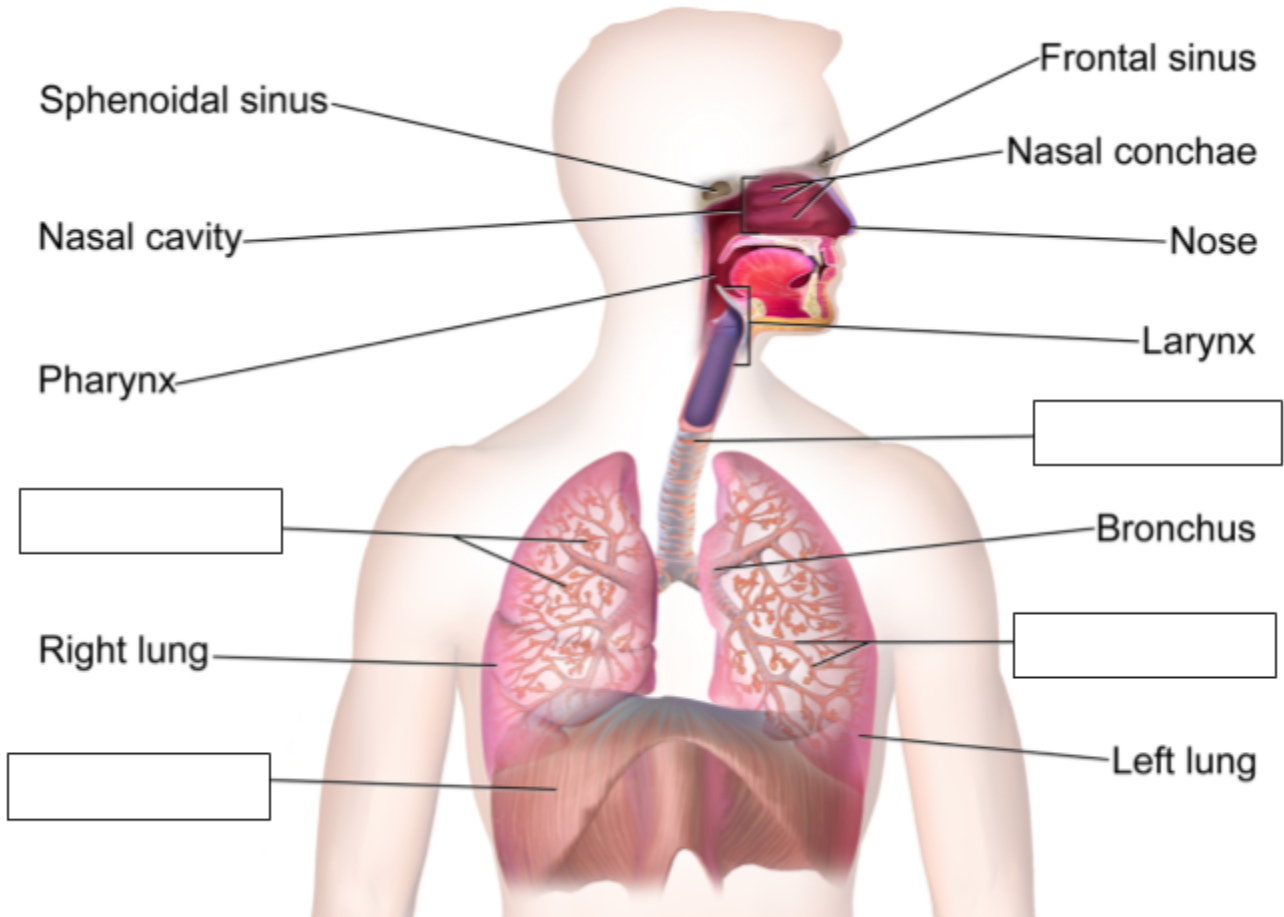
11. Could the body function without a functioning circulatory system? Describe what would happen in the body if the circulatory system did not fulfill its role.

Respiratory System

Directions: Using the provided charts and pages in your textbook to answer the following questions in complete sentences or fill in the blanks.

Structure (pp. 946-947)

1. Label the missing structures



2. List the missing structures air passes through during inhalation.

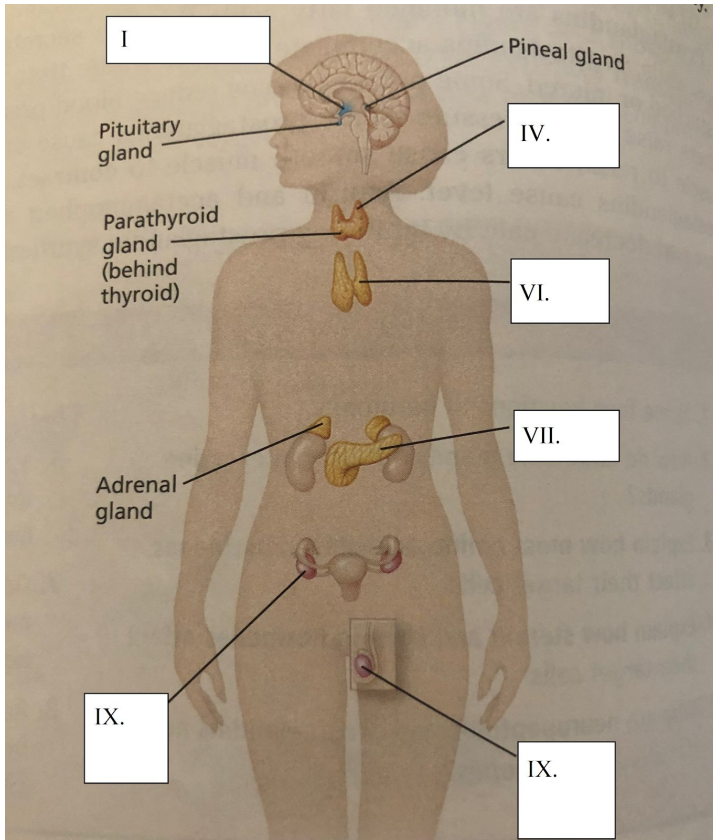
- I. Nose or mouth
- II. Pharynx
- III. Larynx
- IV. _____
- V. _____
- VI. Bronchiole
- VII. _____

Endocrine System

Directions: Using the provided charts and pages in your textbook to answer the following questions in complete sentences or fill in the blanks.

Structure (pp. 1034)

Label the missing structures of the endocrine system



- I. _____
- II. Pineal gland
- III. Pituitary gland
- IV. _____
- V. Parathyroid gland
- VI. _____
- VII. _____
- VIII. Adrenal gland
- IX. _____ (female)/
_____ (male)

Function (pp. 1035-1039) - for the glands *provided* above, list the hormones they secrete, and the final cause of that hormone.

Gland	Hormone(s)	Function of Hormone(s)
Pineal gland		
Pituitary gland (choose four hormones)		
Parathyroid gland		
Adrenal gland (cortex and medulla)		

1. What is the difference between positive and negative feedback mechanisms (p.1041-1042)?

2. Why might an overactive parathyroid gland cause bone problems?