

(Modified from a lesson plan by Stacy Baker & Tracy Trimpe)

Howdy, partner! Time to hitch those oxen to your covered wagon and begin your travels along the Organ Trail! As you trek your trail, you're going to learn how we go from a cell to a person!



You will also be assigned an organ. By the time you arrive at your destination, MyMouth, Organ, you will know all about your organ!

You'll stop at trail stops along the way. That's where information is available.

Let the expedition begin. (Note - if you don't have a copy of the worksheet, click here!)

### Tissues

Remember, we start with cells. When we group similar cells together, we get tissue.

There four are different types of tissue. Your task is to learn about them. Here is a great trail site to visit.

The Four Basic Types of Human Tissue

# Organs & Organ Systems

We next group tissues together and get an organ. When we group organs, we have organ systems.

Your next task is to research organs and organ systems. Here are some trail sites at which you may want to stop.

All Systems Gol

The Amazing Human Body

How the Body Works

Nature's Best, the Human Body

Nervous System Game

It's time for some trivia. Go to the <u>Body Trivia</u> rest stop and answer some questions.

### The Home Stretch

You've almost made it to MyMouth, Organ! Using what you have learned, you have two more assignments.

Assignment - The Human Body Corporation

As a body organ, you are an employee of the Human Body Corporation. Due to recent cost increases, the Human Body is having to fire workers. You need to write a letter to the Human Body Corporation defending your position in the company. In your letter, you need to describe to the corporation the following characteristics of your organ and explain why you are important to the Human Body Corporation.

- 1. Tell what the name of your organ is and where you are located.
- 2. Identify what systems of the body you work with.
- 3. Describe how you work with these systems.
- 4. List the other organs that work with you in your system.
- 5. Describe your main functions as a Human Body organ.
- 6. Tell the corporation how you perform these functions.
- 7. Tell the corporation why you are important and why they should not fire you. Explain what might happen to the Human Body Corporation if they fired you.

You will read your letter to the Human Body Committee (the rest of the class). Along with your letter, you will need to have a photograph (labeled drawing) of your organ to use as a visual aid.

Here are your websites for information.

Biology4Kids.com - Body Systems

<u>Encyclopedia – the Human Body</u>

KidsBiology.com

Nature's Best, the Human Body

How will you be graded on this assignment?

# The Human Body Corporation Rubric

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Category	4	3	2	1
Ideas	Ideas were	Ideas were	Ideas were	The letter
	expressed in a	expressed in a	somewhat	seemed to be
	In this in the property of the second of the little of the			collection of
<ul> <li>If the distance the sub-Colored Service Colored</li> </ul>				unrelated
	fashion. It was	organization	clear. It took	sentences. It

	easy to figure out what the letter was about.	could have been better.	more than one reading to figure out what the letter was about.	difficult to figure out what	
Length	The letter is 10 or more sentences.	The letter is 8-9 sentences.	The letter is 5-7 sentences.	The letter is less than 5 sentences.	
Content Accuracy	The letter contains at least 5 accurate facts about the topic.	accurate facts	The letter contains 1-2 accurate facts about the topic.	The letter contains no accurate facts about the topic.	
Format .	Complies with all the requirements of the assignment.	almost all the requirements of	Complies with several of the requirements of the assignment.	Complies with less than 75% of the requirements of the assignment.	

Rubric made using <u>Rubistar</u>

Assignment, Part Two - The Roundup

You're there! We're going to celebrate with a roundup. To complete the roundup...

Your assignment is to share the information you have discovered by completing a Wanted poster. Here's the assignment and what is required on the poster.

- $8\frac{1}{2} \times 11$  sheet of paper: any color.
- The word "Wanted" at the top of your paper.
- A drawing of your organ.
- Which organ system contains your organ?
- What is your organ's main function(s)?
- · How does your organ work to keep your body healthy?
- · Can a person live without your organ?

Here are your websites for information.

<u>Biology4Kids.com - Body Systems</u>

Encyclopedia – the Human Body

### KidsBiology.com

### Nature's Best, the Human Body

How will you be graded on these assignments?

## Organ Wanted Poster Rubric

Category	4	3	2	1	
Required The poster Elements includes all required elements as as additiona information.		All required elements are included on the poster.	All but 1 of the required elements are included on the poster.	Several requi elements wer missing.	
Knowledge Gained	Student can accurately answer all questions related to facts in the poster and processes used to create the poster.	in the poster and processes used to create the poster.			
Content - Accuracy		facts are displayed on the	3-4 accurate facts are displayed on the poster.	Less than 3 accurate fact are displayed the poster.	

Rubric made using Rubistar

### Conclusion

On your journey, you've learned how we go from cell to tissue to organ to organ system to organism (you!). The

# more you learn, the more amazing you should realize you are!

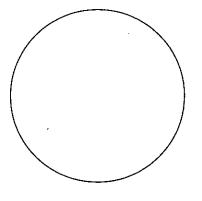
http://mrscienceut.net/TheOrganTrail.html

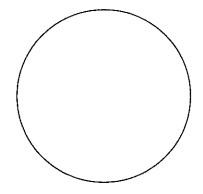
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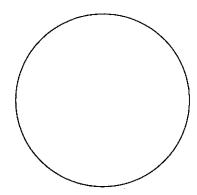
# Organ Trail WebQuest Worksheet

Tís	sues			
Desci	ribe the four types of tissues.			
	Epithelium		,	
	Function			
	Characteristics			
	Classification			
	· .	arandaranda dari bir direci di seri di selanda di di dalam di selanda selanda selanda selanda selanda selanda s		

Draw and label tissue examples in the circles below.







Connective

Function

The Three Elements

- 1.
- 2.
- 3.

Two Kinds

- 1.
- 2.

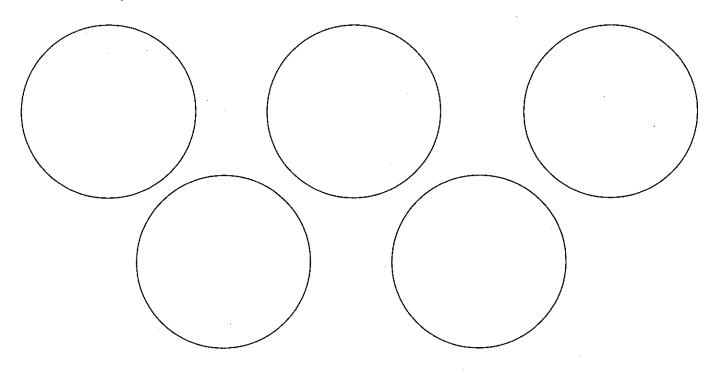
Special Connective Tissue (include function)

1.

2.

3.

Draw examples in the circles below.



Nerve

Function

# Draw Picture

2.

1.

Three Elements

3.

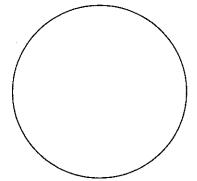
Muscle

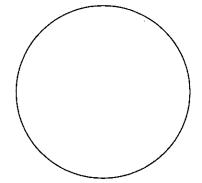
Function

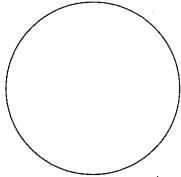
### Three Types

- 1,
- 2.
- 3.

Draw examples in the circles below.







### Organs & Organ Systems

Research the organ systems in the body. Explain how each system helps the body function. Identify major organs in each system and explain their role in the organ system.

Using the All Systems Go! website, answer these questions based on what you learned from playing the activity, and from reading the Learn More section.

- · What body system helps humans turn the food they eat into energy?
- · What body system helps humans breathe?
- What body system controls other body systems?
- · What body system provides structure for the body?
- · What body system allows us to move?
- What body system includes a transport system (blood) and a pump (the heart) that keeps the transport system moving?
- · Can you think of two body systems that work together?
- · What part of the nervous system is essential for it to work properly?
- What event could disrupt one or more body systems?
- What parts of the respiratory system would need to be blocked so no air could get into the respiratory system?

Skeletal System				
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	Market Control of the			
			- Library MANAGER	
Muscular System				
		4 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		
	an and an analysis of the second			
Digestive System				
				Mark to the contract of the co
	d and design	•		
Respiratory System				
	4.00 A.M.			

Circulatory System	
	•
Nervous System	
Body Trivia	
1. The thickness of your skin varies from depending on the area of your body?	om how many millimeters to how many millimeters,
2. List the five senses.	
<b>a.</b>	•
b.	
c.	
d.	
<b>e.</b>	

- 3. How much blood does your body contain?
- 4. What is the strongest muscle in the body and where is it located?
- 5. Muscles account for what percentage of one's body weight?
- 6. How long are the small and large intestines?
- 7. How much skin to most people shed in a lifetime?
- 8. How much water flows through your kidney in one day?
- 9. How often do blink in one day?
- 10. How many breaths do you take in a lifetime?
- 11. How many nerves cells are in your brain?
- 12. If you placed all your blood vessels end-to-end, how long would they be? Using the information, complete the next two assignments.

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