

**Chapter 14.1 Scavenger Hunt (7<sup>th</sup>)**

Date \_\_\_\_\_

Last Name \_\_\_\_\_, First \_\_\_\_\_ per \_\_\_\_\_

*Pre-read chapter 14.1 starting on page 546 and find the answers to the scavenger hunt clues.*

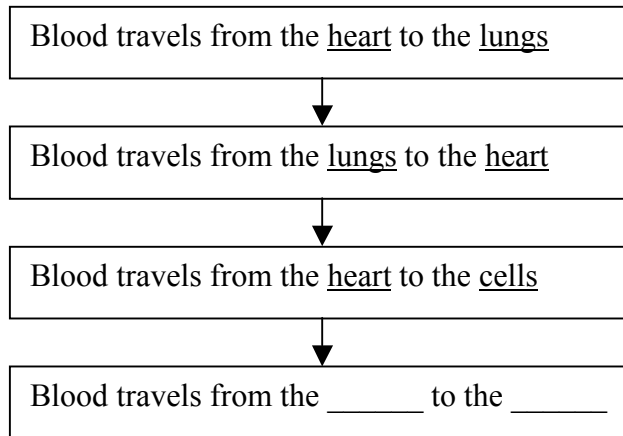
1. What is the **title** of chapter 14? \_\_\_\_\_
2. What is the “**Big Idea**” of chapter 14? \_\_\_\_\_  
\_\_\_\_\_
3. **Check what you know.**
  - a. How is the air you take into your lungs different from the air you blow into a balloon?  
\_\_\_\_\_
  - b. How does this difference occur?  
\_\_\_\_\_
4. What do you think the red disc shaped objects in the picture on pages 546 and 547 are? \_\_\_\_\_
5. **Build Your Science Vocabulary”**
  - a. What is the vocabulary skill being discussed in the “section on page 548?”  
\_\_\_\_\_
  - b. Complete the table.

Latin Word	Definition	Example Sentence
<i>Detect</i>		Lisa searched in the grass trying to _____ a four leaved clover.
	To control, direct, or govern according to rule	A small device <b>regulates</b> the _____ in the building.
		The inside of a computer has a _____ network of wires
<i>Contribute</i>	To give or provide; to bring about a result	

*Choose the word that best completes the sentence*

- i. The doctor used several tests to \_\_\_\_\_ the disease.
  - ii. One group of cells in the heart help \_\_\_\_\_ the rate at which the heart beats.
  - iii. Blood is a \_\_\_\_\_ tissue that has several parts.
  - iv. Air pollution can \_\_\_\_\_ to problems with breathing.
6. How many **key terms** are in chapter 14? \_\_\_\_\_  
An x-ray film on page 549 shows a person with infected lungs. What kind of infection is it? \_\_\_\_\_

7. **“How to Read Science”** page 506
  - a. What is the reading skill being discussed? \_\_\_\_\_
  - b. Complete the flow chart below.



**8. Standards Investigation**

- a. If you tried the challenge on page 551, what would be your goal?  
 \_\_\_\_\_  
 \_\_\_\_\_

9. What is the **title of section 14.1** \_\_\_\_\_

10. List the 15 **key terms** in section 14.1 pg 552

- |          |          |
|----------|----------|
| a. _____ | i. _____ |
| b. _____ | j. _____ |
| c. _____ | k. _____ |
| d. _____ | l. _____ |
| e. _____ | m. _____ |
| f. _____ | n. _____ |
| g. _____ | o. _____ |
| h. _____ |          |

11. Try the **standards warm up** on page 552,

- a. How many times does a heart beat in one minute? \_\_\_\_\_
- b. How many ml of blood does the heart pump in each beat? \_\_\_\_\_
- c. Calculate how many ml of blood a heart pumps in one minute. \_\_\_\_\_
- d. How many times were you able to transfer 60 ml of water in 30 seconds? \_\_\_\_\_
- e. Multiply your # in d by two and calculate # of times in one minute. \_\_\_\_\_
- f. Calculate how many ml of water you would transfer in a minute. \_\_\_\_\_
- g. Compare your performance with that of your heart. What do your results tell you about the strength and speed of your heart? \_\_\_\_\_

\_\_\_\_\_

**12. Function of the Cardiovascular System -A Green Key on page 552**

According to the green key what is the function of the cardiovascular system? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**13. Figure 1 “The Cardiovascular System”**

- a. How far do the blood vessels of the cardiovascular system reach? \_\_\_\_\_
- b. What kind of blood are the red vessels carrying? \_\_\_\_\_
- c. What kind of blood are the blue vessels carrying? \_\_\_\_\_

14. If you go online to the **Active Art activity on page 554**, What web code would you use? \_\_\_\_\_

15. Define the **Highlighted words on pages 554 and 555**

- a. heart \_\_\_\_\_
- b. atrium \_\_\_\_\_
- c. pacemaker \_\_\_\_\_
- d. ventricle \_\_\_\_\_
- e. valve \_\_\_\_\_

**16. Figure 2 “The Heart”**

- a. How many swimming pools could a heart fill in a year? \_\_\_\_\_
- b. What is the name of the large artery that leads from the top of the heart to the body? \_\_\_\_\_
- c. Heart tissue separates the right chambers from the left chambers of the heart and prevents oxygen rich and oxygen poor blood from mixing in the heart. What is the name given to this part of the heart? \_\_\_\_\_
- d. Name the 4 chambers of the heart
  - i. \_\_\_\_\_
  - ii. \_\_\_\_\_
  - iii. \_\_\_\_\_
  - iv. \_\_\_\_\_

**17. A Green Key on page 555**

- a. According to the green key what does the septum separate? \_\_\_\_\_

**18. Figure 3 “Open and Closed Heart Valve”**

- a. What is the function of an open heart valve? \_\_\_\_\_
- b. What is the function of a closed heart valve? \_\_\_\_\_

**19. Figure 4 “Getting Blood to the Body Cells ”.**

- a. During strenuous exercise like swimming, what does the pattern of blood flow ensure? \_\_\_\_\_

**20. Lab Zone Skills Activity Creating Data Tables**

*Complete the data table to organize the data collected by the scientists.*

Organ	ml of blood received	
	At rest	During exercise

- a. Why do some organs receive more blood during exercise? \_\_\_\_\_

**21. Define the Highlighted words on pages 556 and 557**

- a. arteries \_\_\_\_\_  
 \_\_\_\_\_
- b. capillaries \_\_\_\_\_  
 \_\_\_\_\_
- c. veins \_\_\_\_\_  
 \_\_\_\_\_
- d. aorta \_\_\_\_\_  
 \_\_\_\_\_

**22. Figure 5 “Direction of Blood Flow”**

- a. Blood circulates through the body in two loops, with the heart at the center.  
 Where does loop one go? \_\_\_\_\_
- b. Where does loop two go? \_\_\_\_\_

**23. Green Keys” page 558 and 559**

- a. What kind of blood vessel does blood enter when it leaves the heart? \_\_\_\_\_
- b. How many cell layers do the walls of arteries consist of? \_\_\_\_\_
- c. In the capillaries materials in the blood are exchanged between the blood and what else? \_\_\_\_\_

**24. Figure 6 “Artery, Capillary, and Vein”**

- a. How thick are the walls of capillaries? \_\_\_\_\_

**25. Math Skills Calculating a Rate**

- a. What is a rate? \_\_\_\_\_

Calculate your pulse rate if your heart beats 170 times in 2.5 minutes

Pulse rate = \_\_\_\_\_ per minute

**26. Highlighted words on page 560 (define)**

- a. Pressure \_\_\_\_\_  
 \_\_\_\_\_
- b. Blood pressure \_\_\_\_\_  
 \_\_\_\_\_

**27. Figure 7 “Artery and Vein”**

- a. Compare the walls of an artery to the walls of a vein? \_\_\_\_\_  
 \_\_\_\_\_
- b. Which one do you think carries more pressure, arteries or veins? \_\_\_\_\_

**28. Green Key on page 560**

- a. Which kind of vessel carries blood back to the heart? \_\_\_\_\_

**29. Figure 8 “Measuring Blood Pressure”**

- a. What is the name of the instrument used to measure blood pressure?  
 \_\_\_\_\_