

**Health Sciences 1111**  
**Module 12 Cardiovascular System**  
**Lab 12**

View the "**Coronary Artery Bypass Surgery**" video and answer the questions on your worksheet.

**Interactive Physiology**

- Go to the Health Sciences Laboratory Website
- Click on the Interactive Physiology link
  - Login: biomedcorelab
  - Password: waldo
- Click on Cardiovascular
- Do Anatomy review: **The Heart**
- Click on topic menu
- Do **Intrinsic Conduction System**
- Take the quiz
- Click on topic menu
- Do **Cardiac Cycle**
- Take the quiz
- Click on topic menu
- Do the **Anatomy Review: Blood Vessel** structure and function
- Take the quiz
- Click on topic menu
- Do **Measuring Blood Pressure**
- Take the quiz
- Click on topic menu
- Do **Factors that Affect Blood Pressure**
- Take the quiz
- Click on topic menu
- Do **Blood Pressure Regulation**
- Take the quiz
- Exit Interactive Physiology

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## **Anatlab**

- On campus students: Double-click on the Anatlab icon
- Online/Ind Study Students: Insert the Anatlab CD (If you do not have the CD you must purchase one from the bookstore.)
- Click on Abdomen and Thorax
- View the Heart
- Answer the questions, on the computer as they appear in the material
  - Answer the 10 quiz questions at the end of the material

While viewing the film *Coronary Artery Bypass Surgery*, answer the following questions:

1. Deoxygenated blood is returned to the heart into which of the four chambers?
  - a. right atrium
  - b. left atrium
  - c. left ventricle
  - d. right ventricle
2. Name the sac that surrounds the heart.
3. Define Myocardial Infarction and its cause.
4. Is the heart's muscle contractibility affected?
5. T or F: Ischemia is irreversible.
6. If calcium plaques are evident, this increases the risk of having a
7. Blood from the lungs goes to which side of the heart?
8. Which arteries (mentioned in the film) run along the chest wall on either side of the sternum?
9. What is a cannula?
10. What does the heart-lung machine supply the blood with?
11. What happens if air bubbles get into the arterial circulation?
12. The blood that is delivered to the heart itself is drained through the
13. Cooling the temperature of the heart, decreases the O<sub>2</sub> requirement of the heart.
14. The circumflex artery is on which side of the heart?

15. What happens if artificial grafts are used?
16. Quivering of the heart is also called.
17. What are some factors that predispose an individual to coronary disease?
18. In general how long do saphenous veins stay open?
19. In 10 years, what percent of internal mammary arteries are still working?
20. What is the light pink organ that is seen laterally to the heart?

Graphics for Exam 12

20.3 a, b

20.6 a

20.9 a, b

20.14 b

20.21

21.2

21.20

21.33

**Hthsci 1111**  
**Module 12 - The Cardiovascular System**  
**Worksheet**

While viewing the film *Coronary Artery Bypass Surgery*, answer the following questions:

1. Deoxygenated blood is returned to the heart into which of the four chambers?

- a. right atrium
- b. left atrium
- c. left ventricle
- d. right ventricle

ans: a

2. Name the sac that surrounds the heart.

PERICARDIUM

3. Define Myocardial Infarction and its cause.

RESTRICTION OF BLOOD FLOW CAUSING IRREVERSIBLE CARDIAC TISSUE DAMAGE

4. Is the heart's muscle contractibility affected? YES

5. T or F: Ischemia is irreversible. FALSE

6. If calcium plaques are evident, this increases the risk of having a STROKE.

7. Blood from the lungs goes to which side of the heart? LEFT

8. Which arteries (mentioned in the film) run along the chest wall on either side of the sternum?

MAMMARY

9. What is a cannula?

PLASTIC TUBE FROM HEART AND LUNG MACHINE

10. What does the heart-lung machine supply the blood with?

O<sub>2</sub>

11. What happens if air bubbles get into the arterial circulation?

STROKE

12. The blood that is delivered to the heart itself is drained through the CORONARY SINUS.

13. Cooling the temperature of the heart, decreases the O<sub>2</sub> requirement of the heart.

14. The circumflex artery is on which side of the heart?

POSTERIOR

15. What happens if artificial grafts are used?

CLOT

16. Quivering of the heart is also called FIBRILLATOR.

17. What are some factors that predispose an individual to coronary disease?

DIET, GENETIC, SMOKIN, LACK OF EXERCISE

18. In general how long do saphenous veins stay open?

8 YEARS

19. In 10 years, what percent of internal mammary arteries are still working?

95%

20. What is the light pink organ that is seen laterally to the heart?

LUNGS