UPGRADE to the Bundle

Crash Course

ANATOMY & PHYSIOLOGY

48 Episode Series Bundle

- ✅ Classroom Ready - Just Print and Go!
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ALL 48 Episodes with Answer Keys and Direct Video Link

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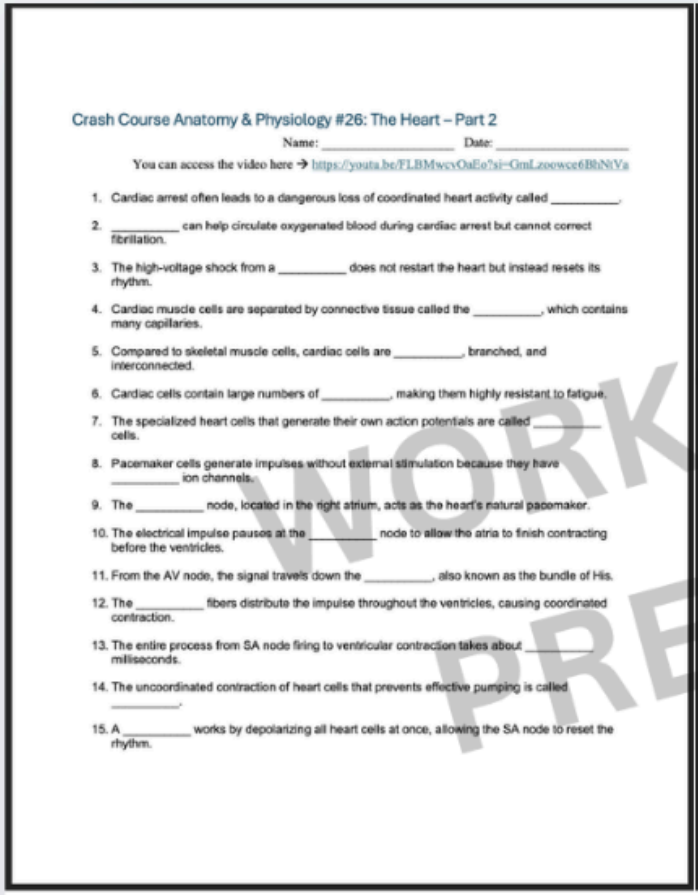
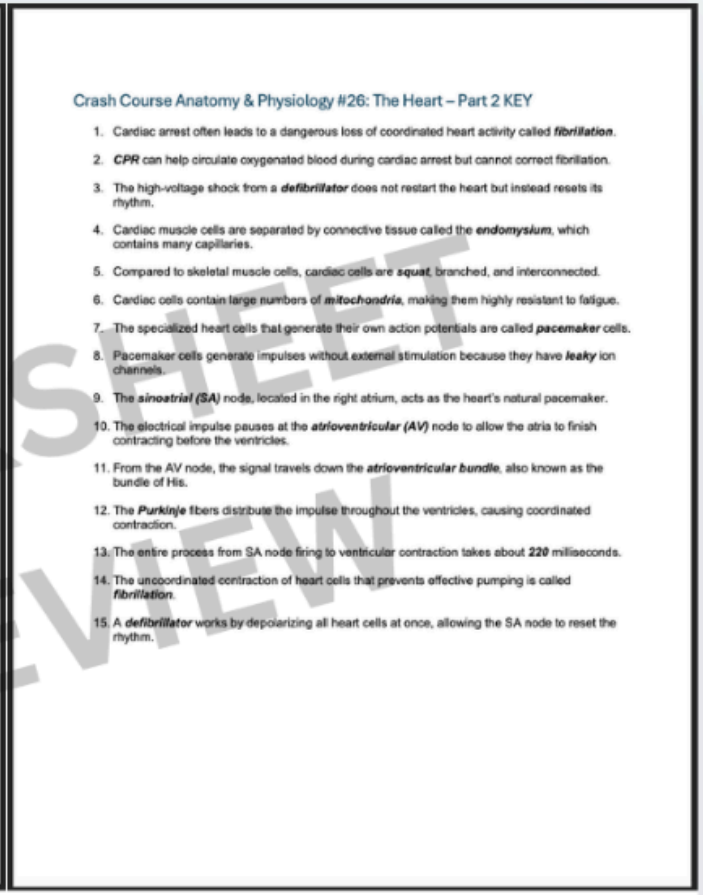


Crash Course Anatomy & Physiology #26: The Heart – Part 2

Name: _____ Date: _____

You can access the video here → https://youtu.be/FLBMwcvOaEo?si=GmLzoowce6BhNtVa

1. Cardiac arrest often leads to a dangerous loss of coordinated heart activity called _____.
2. _____ can help circulate oxygenated blood during cardiac arrest but cannot correct fibrillation.
3. The high-voltage shock from a _____ does not restart the heart but instead resets its rhythm.
4. Cardiac muscle cells are separated by connective tissue called the _____, which contains many capillaries.
5. Compared to skeletal muscle cells, cardiac cells are _____, branched, and interconnected.
6. Cardiac cells contain large numbers of _____, making them highly resistant to fatigue.
7. The specialized heart cells that generate their own action potentials are called _____ cells.
8. Pacemaker cells generate impulses without external stimulation because they have _____ ion channels.
9. The _____ node, located in the right atrium, acts as the heart's natural pacemaker.
10. The electrical impulse pauses at the _____ node to allow the atria to finish contracting before the ventricles.
11. From the AV node, the signal travels down the _____, also known as the bundle of His.
12. The _____ fibers distribute the impulse throughout the ventricles, causing coordinated contraction.
13. The entire process from SA node firing to ventricular contraction takes about _____ milliseconds.
14. The uncoordinated contraction of heart cells that prevents effective pumping is called _____.
15. A _____ works by depolarizing all heart cells at once, allowing the SA node to reset the rhythm.



Crash Course Anatomy & Physiology #26: The Heart – Part 2 KEY

1. Cardiac arrest often leads to a dangerous loss of coordinated heart activity called ***fibrillation***.
2. ***CPR*** can help circulate oxygenated blood during cardiac arrest but cannot correct fibrillation.
3. The high-voltage shock from a ***defibrillator*** does not restart the heart but instead resets its rhythm.
4. Cardiac muscle cells are separated by connective tissue called the ***endomysium***, which contains many capillaries.
5. Compared to skeletal muscle cells, cardiac cells are ***squat***, branched, and interconnected.
6. Cardiac cells contain large numbers of ***mitochondria***, making them highly resistant to fatigue.
7. The specialized heart cells that generate their own action potentials are called ***pacemaker*** cells.
8. Pacemaker cells generate impulses without external stimulation because they have ***leaky*** ion channels.
9. The ***sinoatrial (SA)*** node, located in the right atrium, acts as the heart's natural pacemaker.
10. The electrical impulse pauses at the ***atrioventricular (AV)*** node to allow the atria to finish contracting before the ventricles.
11. From the AV node, the signal travels down the ***atrioventricular bundle***, also known as the bundle of His.
12. The ***Purkinje*** fibers distribute the impulse throughout the ventricles, causing coordinated contraction.
13. The entire process from SA node firing to ventricular contraction takes about ***220*** milliseconds.
14. The uncoordinated contraction of heart cells that prevents effective pumping is called ***fibrillation***.
15. A ***defibrillator*** works by depolarizing all heart cells at once, allowing the SA node to reset the rhythm.

WORKSHEET PREVIEW

15 Questions **Answer Key Included**

Save 85% per worksheet!