

REVIEW SHEET

Conduction System of the Heart and Electrocardiography

Name _____ LabTime/Date _____

The Intrinsic Conduction System

1. List the elements of the intrinsic conduction system in order, starting from the SA node.

SA node → _____ → _____ → _____
_____ → _____

At what structure in the transmission sequence is the impulse temporarily delayed? _____

Why? _____

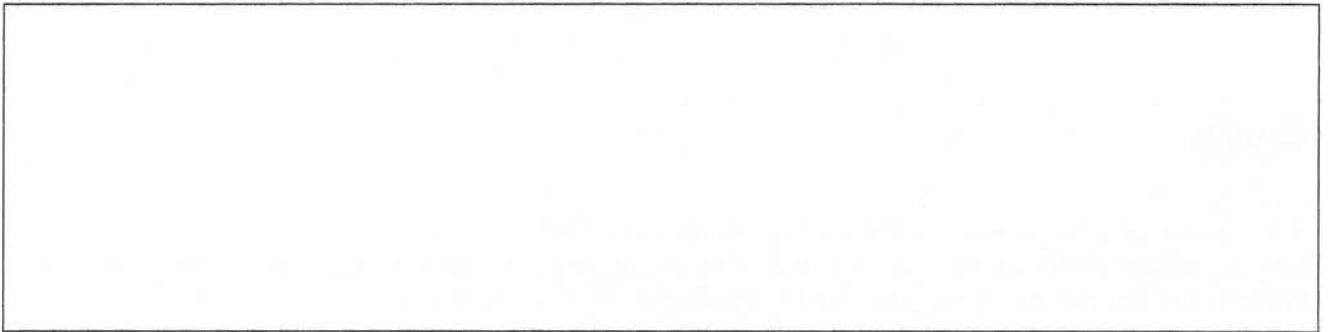
2. Even though cardiac muscle has an inherent ability to beat, the intrinsic conduction system plays a critical role in heart physiology.

What is that role? _____

Electrocardiography

3. Define ECG. _____

4. Draw an ECG wave form representing one heartbeat. Label the P wave, QRS complex, and T wave; the P-R interval; the S-T segment, and the Q-T interval.



5. Why does heart rate increase during running? _____

6. Describe what happens in the cardiac cycle in the following situations.

1. immediately before the P wave: _____
2. during the P wave: _____
3. immediately after the P wave: _____
4. during the QRS complex: _____
5. immediately after the QRS complex (S-T segment): _____
6. during the T wave: _____

7. Define the following terms.

1. *tachycardia*: _____
2. *bradycardia*: _____
3. *fibrillation*: _____

8. Abnormalities of heart valves can be detected more accurately by auscultation than by electrocardiography. Why is this so?

WHY THIS MATTERS

9. Given what you know about the correlation between the ECG waves and the electrical events in the heart, what wave of the ECG tracing would you expect to be affected in atrial fibrillation? Explain.

10. Which is more serious, atrial fibrillation or ventricular fibrillation? _____

Why? _____

Credits

Illustrations

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