

Biopac Student Lab® Lesson 17 HEART SOUNDS

Procedure

Rev. 01152013

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II. EXPERIMENTAL OBJECTIVES

- 1. To listen to human heart sounds and describe them qualitatively in terms of intensity or loudness, pitch, and duration.
- To correlate the human heart sounds with the opening and closing of cardiac valves during the cardiac cycle and with systole and diastole of the ventricles.
- 3. To determine the nature of the change in the relationship between electrical and mechanical events of the cardiac cycle as heart rate increases.

III. MATERIALS

- BIOPAC Stethoscope (\$\$30L)
- BIOPAC Electrode Lead Set (SS2L)
- BIOPAC Disposable Electrodes (EL503,) 3 electrodes per Subject
- BIOPAC Electrode Gel (GEL1) and Abrasive Pad (ELPAD)
- Biopac Student Lab System: BSL 4 software, MP36, MP35 or MP45 hardware
- Computer System (Windows 8, 7, Vista, XP, Mac OS X 10.5 10.8)

IV. EXPERIMENTAL METHODS

A. SETUP

FAST TRACK Setup

- Turn the computer ON.
 - If using an MP36/35 unit, turn it OFF.
 - If using an MP45, make sure USB cable. is connected and "Ready" light is ON.
- Plug the equipment in as follows:

Stethoscope (SS30L) - CH 1 Electrode lead set (SS2L) — CH 2.

Turn ON the MP36/35 unit.

Detailed Explanation of Setup Steps



Fig. 17.5 MP3X (top) and MP45 (bottom) equipment connections

Setup continues....

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Table of Contents Biopac Lesson 17 Teachers Guide

- 1. Understanding the eBook Biopac Lesson 17 Teachers Guide
 - The Rise of Digital Reading Biopac Lesson 17 Teachers Guide
 - Advantages of eBooks Over Traditional Books
- 2. Identifying Biopac Lesson 17 Teachers Guide
 - Exploring Different Genres
 - Considering Fiction vs. Non-Fiction
 - Determining Your Reading Goals
- 3. Choosing the Right eBook Platform
 - Popular eBook Platforms
 - Features to Look for in an Biopac Lesson 17 Teachers Guide
 - User-Friendly Interface
- 4. Exploring eBook Recommendations from Biopac Lesson 17 Teachers Guide
 - Personalized Recommendations
 - Biopac Lesson 17 Teachers Guide User Reviews and Ratings
 - Biopac Lesson 17 Teachers Guide and Bestseller Lists
- 5. Accessing Biopac Lesson 17 Teachers Guide Free and Paid eBooks
 - Biopac Lesson 17 Teachers Guide Public Domain eBooks
 - Biopac Lesson 17 Teachers Guide eBook Subscription Services
 - Biopac Lesson 17 Teachers Guide Budget-Friendly Options
- 6. Navigating Biopac Lesson 17 Teachers Guide eBook Formats

- o ePub, PDF, MOBI, and More
- Biopac Lesson 17 Teachers Guide Compatibility with Devices
- Biopac Lesson 17 Teachers Guide Enhanced eBook Features
- 7. Enhancing Your Reading Experience
 - o Adjustable Fonts and Text Sizes of Biopac Lesson 17 Teachers Guide
 - Highlighting and Note-Taking Biopac Lesson 17 Teachers Guide
 - Interactive Elements Biopac Lesson 17 Teachers Guide
- 8. Staying Engaged with Biopac Lesson 17 Teachers Guide
 - Joining Online Reading Communities
 - Participating in Virtual Book Clubs
 - Following Authors and Publishers Biopac Lesson 17 Teachers Guide
- 9. Balancing eBooks and Physical Books Biopac Lesson 17 Teachers Guide
 - Benefits of a Digital Library
 - Creating a Diverse Reading Collection Biopac Lesson 17 Teachers Guide
- 10. Overcoming Reading Challenges
 - Dealing with Digital Eye Strain
 - Minimizing Distractions
 - Managing Screen Time
- 11. Cultivating a Reading Routine Biopac Lesson 17 Teachers Guide
 - Setting Reading Goals Biopac Lesson 17 Teachers Guide
 - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Biopac Lesson 17 Teachers Guide
 - Fact-Checking eBook Content of Biopac Lesson 17 Teachers Guide
 - Distinguishing Credible Sources
- 13. Promoting Lifelong Learning
 - Utilizing eBooks for Skill Development
 - Exploring Educational eBooks
- 14. Embracing eBook Trends
 - Integration of Multimedia Elements
 - Interactive and Gamified eBooks

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