

Electrocardiography

Fifth Edition

Kathryn Booth | Thomas E. O’Brien



ELECTROCARDIOGRAPHY FOR HEALTHCARE PROFESSIONALS

CHAPTER 1 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
1.1	The ECG and Its History	Understand the ECG and the history of electrocardiography	73% 0:26 2250 *As of: 11/7/17	Matching: Key Term Matching		1-3; 5; 9; 15		1-5; 36-38; 56	
1.2	The Uses of an ECG	Understand the purpose of an ECG	65% 0:31 3507 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-13; 23-26; 29; 60	
1.2	The Uses of an ECG	Know the various purposes for ECGs in acute care	73% 0:30 2151 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-13; 23-26; 29; 60	
1.2	The Uses of an ECG	Describe continuous monitoring relative to ECGs	47% 0:30 2697 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-13; 23-26; 29; 60	
1.2	The Uses of an ECG	Know the various purposes of ECGs in ambulatory care settings	59% 0:35 2692 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-13; 23-26; 29; 60	
1.2	The Uses of an ECG	Understand the conditions that are evaluated by ECG testing	61% 0:31 2857 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-13; 23-26; 29; 60	
1.2	The Uses of an ECG	Know other types of cardiac testing	66% 0:34 2222 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-13; 23-26; 29; 60	

CHAPTER 1 Challenging Topics <i>(continued)</i>									
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1.2	The Uses of an ECG	Understand how ECGs can be used outside of healthcare facilities	59% 0:36 2743 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-13; 23-26; 29; 60	
1.2	The Uses of an ECG	Describe the use of defibrillators	65% 0:30 2162 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		1-5; 36-38; 56	
1.2	The Uses of an ECG	Know the purpose of automatic external defibrillators	74% 0:32 2163 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-12; 22-25; 28; 57; 65-66	
1.2	The Uses of an ECG	Understand the use of automatic external defibrillators	71% 0:26 1932 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-12; 22-25; 28; 57; 65-66	
1.2	The Uses of an ECG	Describe the use of automatic external defibrillators	72% 0:31 1961 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-12; 22-25; 28; 57; 65-66	
1.2	The Uses of an ECG	Understand the use of telemedicine	48% 0:31 2804 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-12; 22-25; 28; 57; 65-66	
1.2	The Uses of an ECG	Describe professional opportunities in electrocardiography	59% 0:33 7211 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-12; 22-25; 28; 57; 65-66	
1.2	The Uses of an ECG	Understand career fields related to electrocardiography	59% 0:38 2627 *As of: 11/7/17	Matching: Key Term Matching Paragraph: How ECGs are Used	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	6-7; 12; 16-20; 23		6-12; 22-25; 28; 57; 65-66	
1.3	Preparing for an ECG	Understand the legal and ethical issues related to electrocardiography	57% 0:27 2449 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	

CHAPTER 1 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
1.3	Preparing for an ECG	Understand legal and ethical issues related to electrocardiography	69% 0:30 20518 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Understand HIPAA and patient privacy	66% 0:27 2019 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Know how ethics can be practiced in terms of patient privacy	73% 0:38 2149 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Understand medical professional liability	73% 0:37 2049 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Understand the differences between slander and libel	69% 0:22 1749 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Know how implied consent is used in patient care	75% 0:27 1793 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Describe the required entries for medical records	60% 0:31 2481 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Know how to obtain consent from a patient	74% 0:33 1803 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Know about informed consent	67% 0:33 2275 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.3	Preparing for an ECG	Understand the steps in troubleshooting while performing an ECG	60% 0:41 2478 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG Paragraph: Troubleshooting Sequencing: Troubleshooting		11; 22; 24; 27	33-36	12; 14-21; 26-27; 30-32; 58-59; 67-70	
1.4	Safety and Infection Control	Know safety and infection control with electrocardiography	68% 0:33 2267 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG		4; 8; 10; 26; 32		13; 29; 33-35; 38-41; 60-63	
1.4	Safety and Infection Control	Understand how to maintain proper body mechanics	45% 0:38 3455 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG		4; 8; 10; 26; 32		13; 29; 33-35; 38-41; 60-63	
1.4	Safety and Infection Control	Know isolation precautions	62% 0:26 2143 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG		4; 8; 10; 26; 32		13; 29; 33-35; 38-41; 60-63	

CHAPTER 1 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
1.4	Safety and Infection Control	Understand standard and isolation precautions	73% 0:26 1807 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG		4; 8; 10; 26; 32		13; 29; 33-35; 38-41; 60-63	
1.4	Safety and Infection Control	Describe standard precautions related to electrocardiography	74% 0:30 2005 *As of: 11/7/17	Paragraph: What You Need to Know to Perform an ECG		4; 8; 10; 26; 32		13; 29; 33-35; 38-41; 60-63	
1.5	Compare basic vital sign measurement related to the ECG.	Know vital signs	679% 0:28 2502 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Know vital signs and normal ranges	74% 0:23 1841 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Define pulse and respiration	74% 0:24 1869 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Understand pulse	75% 0:30 1876 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Understand respiration	64% 0:33 2424 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Know blood pressure	70% 0:24 1924 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Understand factors that affect blood pressure	57% 0:26 2291 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Understand blood pressure	70% 0:33 2126 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	
1.5	Compare basic vital sign measurement related to the ECG.	Describe blood pressure	75% 0:29 1788 *As of: 11/7/17			13-14; 21; 25; 28-31		42-45; 64; 71	

CHAPTER 2 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
2.1	Circulation and the ECG	Know how circulation occurs in the body	73% 0:28 1821 *As of: 11/7/17	Paragraph: Circulation and the ECG	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	1-10			
2.2	Anatomy of the Heart	Identify the structures of the heart	72% 0:28 1810 *As of: 11/7/17	Matching I: Match the Valves, Vessels, and Chambers Labeling: Label the Parts Classification: Anatomy of the Heart Labeling: Anatomy of the Heart Paragraph: Anatomy of the Heart	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	28-29; 31; 36; 39; 43		3-16; 18-19; 46; 75	
2.2	Anatomy of the Heart	Match the chambers and valves of the heart	59% 0:55 2317 *As of: 11/7/17	Matching I: Match the Valves, Vessels, and Chambers Labeling: Label the Parts Classification: Anatomy of the Heart Labeling: Anatomy of the Heart Paragraph: Anatomy of the Heart	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	28-29; 31; 36; 39; 43		3-16; 18-19; 46; 75	
2.2	Anatomy of the Heart	Identify the different types of heart valves	63% 0:28 2138 *As of: 11/7/17	Matching I: Match the Valves, Vessels, and Chambers Labeling: Label the Parts Classification: Anatomy of the Heart Labeling: Anatomy of the Heart Paragraph: Anatomy of the Heart	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	28-29; 31; 36; 39; 43		3-16; 18-19; 46; 75	
2.2	Anatomy of the Heart	Identify major vessels to and from the heart	53% 0:29 2990 *As of: 11/7/17	Matching I: Match the Valves, Vessels, and Chambers Labeling: Label the Parts Classification: Anatomy of the Heart Labeling: Anatomy of the Heart Paragraph: Anatomy of the Heart	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	28-29; 31; 36; 39; 43		3-16; 18-19; 46; 75	
2.2	Anatomy of the Heart	Understand the function of the major vessels to and from the heart	65% 0:26 2039 *As of: 11/7/17	Matching I: Match the Valves, Vessels, and Chambers Labeling: Label the Parts Classification: Anatomy of the Heart Labeling: Anatomy of the Heart Paragraph: Anatomy of the Heart	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	28-29; 31; 36; 39; 43		3-16; 18-19; 46; 75	
2.3	Principles of Circulation	Understand pulmonary circulation	65% 0:26 2000 *As of: 11/7/17	Matching III: Match the Information about Circulation Labeling: Label the Diagram of Blood Flow Classification: Principles of Circulation Paragraph: Principles of Circulation	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	34-35; 38; 40; 44		17; 20-22; 42-48	
2.3	Principles of Circulation	Understand systemic circulation	61% 0:29 2165 *As of: 11/7/17	Matching III: Match the Information about Circulation Labeling: Label the Diagram of Blood Flow Classification: Principles of Circulation Paragraph: Principles of Circulation	Types and Uses of Electrocardiography [Version a] Types and Uses of Electrocardiography [Version b] Types and Uses of Electrocardiography [Version c]	34-35; 38; 40; 44		17; 20-22; 42-48	

CHAPTER 2 Challenging Topics <i>(continued)</i>									
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2.3	Principles of Circulation	Identify coronary circulation and the heart's blood supply	67% 0:34 2183 *As of: 11/7/17	Matching III: Match the Information about Circulation Labeling: Label the Diagram of Blood Flow Classification: Principles of Circulation Paragraph: Principles of Circulation		34-35; 38; 40; 44		17; 20-22; 42-48	
2.3	Principles of Circulation	Understand the heart as a pump	56% 0:25 2367 *As of: 11/7/17	Matching III: Match the Information about Circulation Labeling: Label the Diagram of Blood Flow Classification: Principles of Circulation Paragraph: Principles of Circulation		34-35; 38; 40; 44		17; 20-22; 42-48	
2.4	The Cardiac Cycle	Understand the relaxation of the heart	66% 0:28 2323 *As of: 11/7/17	Matching III: Match the Information about Circulation Labeling: The Cardiac Cycle Paragraph: The Cardiac Cycle Animation: Cardiac Cycle		32-33; 37; 43		23-26; 49-51	Cardiac Cycle
2.5	Conduction System of the Heart	Understand the conduction system of the heart	50% 0:26 2552 *As of: 11/7/17	Matching II: Match the Conduction System Parts Labeling: Conduction System of the Heart Paragraph: Conduction System of the Heart		11-20; 26-27; 30; 41; 43	45-46	27-36; 52-56	
2.5	Conduction System of the Heart	Identify structures of the conduction system	67% 0:31 2191 *As of: 11/7/17	Matching II: Match the Conduction System Parts Labeling: Conduction System of the Heart Paragraph: Conduction System of the Heart		11-20; 26-27; 30; 41; 43	45-46	27-36; 52-56	
2.5	Conduction System of the Heart	Know the structure of the heart	73% 0:31 1818 *As of: 11/7/17	Matching II: Match the Conduction System Parts Labeling: Conduction System of the Heart Paragraph: Conduction System of the Heart		11-20; 26-27; 30; 41; 43	45-46	27-36; 52-56	
2.6	Electrical Stimulation and the ECG Waveform	Know the electrical stimulation of the heart	56% 0:31 2377 *As of: 11/7/17	Classification: Electrical Stimulation and the ECG Waveform Paragraph: Electrical Stimulation and the ECG Waveform		21-25; 42; 43		1; 37-39; 57-80	
2.6	Electrical Stimulation and the ECG Waveform	Know what each part of the waveform represents	72% 0:26 1824 *As of: 11/7/17	Classification: Electrical Stimulation and the ECG Waveform Paragraph: Electrical Stimulation and the ECG Waveform		21-25; 42; 43		1; 37-39; 57-80	
2.6	Electrical Stimulation and the ECG Waveform	Understand each part of the waveforms	57% 0:28 2272 *As of: 11/7/17	Classification: Electrical Stimulation and the ECG Waveform Paragraph: Electrical Stimulation and the ECG Waveform		21-25; 42; 43		1; 37-39; 57-80	
2.6	Electrical Stimulation and the ECG Waveform	Understand the ECG waveforms	55% 0:28 2335 *As of: 11/7/17	Classification: Electrical Stimulation and the ECG Waveform Paragraph: Electrical Stimulation and the ECG Waveform		21-25; 42; 43		1; 37-39; 57-80	

CHAPTER 3 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
3.1	Producing the ECG Waveform	Know how the ECG functions	75% 0:29 1859 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		1-12; 17; 27; 31; 35-36; 40-44	54	1-10; 36	
3.1	Producing the ECG Waveform	Understand how an ECG functions	71% 0:24 1817 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		1-12; 17; 27; 31; 35-36; 40-44	54	1-10; 36	
3.1	Producing the ECG Waveform	Understand the purpose of the Einthoven triangle	60% 0:27 2101 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		1-12; 17; 27; 31; 35-36; 40-44	54	1-10; 36	
3.1	Producing the ECG Waveform	Understand the electrical current of the heart	66% 0:30 2061 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		1-12; 17; 27; 31; 35-36; 40-44	54	1-10; 36	
3.1	Producing the ECG Waveform	Understand how standard limb leads work	49% 0:34 2986 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		1-12; 17; 27; 31; 35-36; 40-44	54	1-10; 36	
3.1	Producing the ECG Waveform	Understand the purpose of augmented leads	57% 0:36 2373 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		1-12; 17; 27; 31; 35-36; 40-44	54	1-10; 36	
3.1	Producing the ECG Waveform	Know how chest leads work	52% 0:30 2664 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		1-12; 17; 27; 31; 35-36; 40-44	54	1-10; 36	
3.2	ECG Machines	Know the various types of ECG machines	75% 0:31 1752 *As of: 11/7/17	Matching I: Match the ECG Lead Names with Their Types Labeling: Label the Lead Tracings in the Einthoven Triangle Paragraph: Producing the ECG Waveform		13; 18; 21; 24-25; 29		11-12; 32-34; 39-41	
3.2	ECG Machines	Know the functions of the electrocardiograph	67% 0:28 1974 *As of: 11/7/17	Matching II: Key Term Matching Paragraph: ECG Machines		13; 18; 21; 24-25; 29		11-12; 32-34; 39-41	

CHAPTER 3 Challenging Topics <i>(continued)</i>									
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3.2	ECG Machines	Know the purpose and function of ECG output displays	52% 0:31 2503 *As of: 11/7/17	Matching II: Key Term Matching Paragraph: ECG Machines		13; 18; 21; 24-25; 29		11-12; 32-34; 39-41	
3.2	ECG Machines	Understand other functions of ECG machines	52% 0:41 2795 *As of: 11/7/17	Matching II: Key Term Matching Paragraph: ECG Machines		13; 18; 21; 24-25; 29		11-12; 32-34; 39-41	
3.2	ECG Machines	Understand advancing technologies	48% 0:30 3476 *As of: 11/7/17	Matching II: Key Term Matching Paragraph: ECG Machines		13; 18; 21; 24-25; 29		11-12; 32-34; 39-41	
3.2	ECG Machines	Understand how ECG technology has advanced over time	71% 0:44 2223 *As of: 11/7/17	Matching II: Key Term Matching Paragraph: ECG Machines		13; 18; 21; 24-25; 29		11-12; 32-34; 39-41	
3.2	ECG Machines	Determine how ECG records can be protected and HIPAA compliant	52% 0:37 3355 *As of: 11/7/17	Matching II: Key Term Matching Paragraph: ECG Machines		13; 18; 21; 24-25; 29		11-12; 32-34; 39-41	
3.3	ECG Controls	Know the three most important controls on the electrocardiograph	62% 0:30 2224 *As of: 11/7/17	Paragraph: Controls		14-16; 23; 28; 30; 32-33	55	13-16; 35; 37-38; 42-44	
3.3	ECG Controls	Understand speed and speed control on the electrocardiograph	60% 0:30 2576 *As of: 11/7/17	Paragraph: Controls		14-16; 23; 28; 30; 32-33	55	13-16; 35; 37-38; 42-44	
3.3	ECG Controls	Understand the gain of the electrocardiograph	66% 0:26 2061 *As of: 11/7/17	Paragraph: Controls		14-16; 23; 28; 30; 32-33	55	13-16; 35; 37-38; 42-44	
3.3	ECG Controls	Know the purpose of the artifact filter	52% 0:31 2732 *As of: 11/7/17	Paragraph: Controls		14-16; 23; 28; 30; 32-33	55	13-16; 35; 37-38; 42-44	
3.3	ECG Controls	Know other controls on the ECG machine	55% 0:36 2178 *As of: 11/7/17	Paragraph: Controls		14-16; 23; 28; 30; 32-33	55	13-16; 35; 37-38; 42-44	
3.3	ECG Controls	Understand the purpose of the LCD display	58% 0:27 2304 *As of: 11/7/17	Paragraph: Controls		14-16; 23; 28; 30; 32-33	55	13-16; 35; 37-38; 42-44	
3.3	ECG Controls	Know the purpose of the lead selector on an ECG machine	69% 0:28 1822 *As of: 11/7/17	Paragraph: Controls		14-16; 23; 28; 30; 32-33	55	13-16; 35; 37-38; 42-44	
3.4	Electrodes	Define electrodes	74% 0:27 1787 *As of: 11/7/17	Paragraph: Electrodes		22; 26; 34; 37-39; 45	53	17-18; 45-47	

CHAPTER 3 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
3.4	Electrodes	Understand the purpose and function of electrodes	73% 0:36 1924 *As of: 11/7/17	Paragraph: Electrodes		22; 26; 34; 37-39; 45	53	17-18; 45-47	
3.5	ECG Graph Paper	Understand the purpose and types of ECG graph paper	60% 0:32 2419 *As of: 11/7/17	Labeling: Label the ECG Tracing Measurements Paragraph: ECG Graph Paper		19-20; 45	52	19; 48	
3.5	ECG Graph Paper	Know when to replace ECG graph paper	60% 0:32 2583 *As of: 11/7/17	Labeling: Label the ECG Tracing Measurements Paragraph: ECG Graph Paper		19-20; 45	52	19; 48	
3.5	ECG Graph Paper	Understand measurements on the ECG tracing	67% 0:32 2218 *As of: 11/7/17	Labeling: Label the ECG Tracing Measurements Paragraph: ECG Graph Paper		19-20; 45	52	19; 48	
3.6	Calculating the Heart Rate	Know the methods for calculating heart rates on an ECG tracing	59% 0:23 2177 *As of: 11/7/17	Matching III: Match the Times on an ECG Tracing Worksheet: Estimate Heart Rate Using R-R Wave Method Worksheet: Estimate Heart Rate Using 6-Second Method Worksheet: Determine Heart Rate Using 1500 Method Paragraph: Calculating Heart Rate		46-51		20-31; 49-55	
3.6	Calculating the Heart Rate	Understand calculating heart rates using R-R method	70% 0:26 1841 *As of: 11/7/17	Matching III: Match the Times on an ECG Tracing Worksheet: Estimate Heart Rate Using R-R Wave Method Worksheet: Estimate Heart Rate Using 6-Second Method Worksheet: Determine Heart Rate Using 1500 Method Paragraph: Calculating Heart Rate		46-51		20-31; 49-55	
3.6	Calculating the Heart Rate	Understand calculating heart rates using the 1500 method	67% 0:32 1929 *As of: 11/7/17	Matching III: Match the Times on an ECG Tracing Worksheet: Estimate Heart Rate Using R-R Wave Method Worksheet: Estimate Heart Rate Using 6-Second Method Worksheet: Determine Heart Rate Using 1500 Method Paragraph: Calculating Heart Rate		46-51		20-31; 49-55	
3.6	Calculating the Heart Rate	Understand calculating heart rates using the 6-second method	69% 0:24 1869 *As of: 11/7/17	Matching III: Match the Times on an ECG Tracing Worksheet: Estimate Heart Rate Using R-R Wave Method Worksheet: Estimate Heart Rate Using 6-Second Method Worksheet: Determine Heart Rate Using 1500 Method Paragraph: Calculating Heart Rate		46-51		20-31; 49-55	

CHAPTER 3 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
3.6	Calculating the Heart Rate		76% 0:37 770 *As of: 11/7/17	Matching III: Match the Times on an ECG Tracing Worksheet: Estimate Heart Rate Using R-R Wave Method Worksheet: Estimate Heart Rate Using 6-Second Method Worksheet: Determine Heart Rate Using 1500 Method Paragraph: Calculating Heart Rate		46-51		20-31; 49-55	
3.6	Calculating the Heart Rate		76% 0:37 770 *As of: 11/7/17	Matching III: Match the Times on an ECG Tracing Worksheet: Estimate Heart Rate Using R-R Wave Method Worksheet: Estimate Heart Rate Using 6-Second Method Worksheet: Determine Heart Rate Using 1500 Method Paragraph: Calculating Heart Rate		46-51		20-31; 49-55	

CHAPTER 4 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
4.1	Preparation for the ECG Procedure	Know how to prep for the ECG procedure	61% 0:30 2428 *As of: 11/7/17	Paragraph: Preparation for the ECG Procedure		19		1-2; 39	
4.3	Safety	Know proper safety guidelines when performing an ECG	73% 0:33 2061 *As of: 11/7/17	18					18; 51-53
4.4	Applying the Electrodes and Leads	Know the landmarks of the chest for electrode placement	59% 0:68 2321 *As of: 11/7/17	Matching I: Match the Landmarks with Their Locations Matching I: Match the Leads to Their Correct Placements Matching II: Key Terms Labeling: Identify Leads and Their Descriptions Labeling: Identifying Anatomical Landmarks Paragraph: Identifying Anatomical Landmarks Sequencing: Applying the Electrodes and Leads Paragraph: Applying the Electrodes and Leads	Anatomic Landmarks [Version a] Anatomic Landmarks [Version b] Anatomic Landmarks [Version c] Adult Lead Placement	1-14; 16-17; 20; 28; 31-35; 37; 40; 45; 47-49		6-17; 36	
4.4	Applying the Electrodes and Leads	Know the electrode placement and leads	56% 0:28 2415 *As of: 11/7/17	Matching I: Match the Landmarks with Their Locations Matching I: Match the Leads to Their Correct Placements Matching II: Key Terms Labeling: Identify Leads and Their Descriptions Labeling: Identifying Anatomical Landmarks Paragraph: Identifying Anatomical Landmarks Sequencing: Applying the Electrodes and Leads Paragraph: Applying the Electrodes and Leads	Adult Chest Lead Placement	1-14; 16-17; 20; 28; 31-35; 37; 40; 45; 47-49		6-17; 36	
4.6	Checking the ECG Tracing	Identifying artifacts on the ECG	55% 0:22 2451 *As of: 11/7/17			21-23; 25-27; 32; 38; 43-44	51	21-26; 41	
4.6	Checking the ECG Tracing	Know how to troubleshoot to correct artifacts	44% 0:39 4213 *As of: 11/7/17	21-23; 25-27; 32; 38; 43-44					21-26; 41
4.6	Checking the ECG Tracing	Identify different types of artifacts	73% 0:25 1835 *As of: 11/7/17			21-23; 25-27; 32; 38; 43-44	51	21-26; 41	
4.6	Checking the ECG Tracing	Know the different types of artifacts	63% 0:29 2177 *As of: 11/7/17	21-23; 25-27; 32; 38; 43-44					21-26; 41

CHAPTER 4 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
4.8	Equipment Maintenance	Know the proper equipment maintenance	75% 0:25 1769 *As of: 11/7/17	Paragraph: Equipment Maintenance				28; 44-45	
4.10	Cardiac Monitoring	Know the difference of cardiac monitoring and an ECG	57% 0:33 2355 *As of: 11/7/17	Paragraph: Cardiac Monitoring		29; 33; 46	50	32; 38; 55	
4.11	Select Patient Considerations	Know when to do special considerations for patients	69% 0:33 1922 *As of: 11/7/17	Paragraph: Special Patient Considerations	Right-Side Chest Lead Placement	36; 39	52	33-34; 46-49	
4.11	Select Patient Considerations	Understand when to do special considerations for patients	66% 0:29 1948 *As of: 11/7/17	Paragraph: Special Patient Considerations	Right-Side Chest Lead Placement	36; 39	52	33-34; 46-49	
4.12	Handling Emergencies	Know how to handle emergencies for cardiac or respiratory arrest	68% 0:26 1965 *As of: 11/7/17	Paragraph: Handling Emergencies				35; 50; 56	
4.12	Handling Emergencies	Understand seizures	75% 0:20 1768 *As of: 11/7/17	Paragraph: Handling Emergencies				35; 50; 56	

CHAPTER 5 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
5.1	Rhythm Interpretation	Know why rhythm interpretations are important	58% 0:30 2319 *As of: 11/7/17					1; 37	
5.1	Rhythm Interpretation	Know how to identify rhythm interpretations	61% 0:35 2181 *As of: 11/7/17						
5.2	Identifying the Components of the Rhythm	Know the five-step process of gathering components of the rhythm	56% 0:36 2490 *As of: 11/7/17	Matching: Key Term Matching	Parts of an ECG Tracing ECG Rhythm Identification	1; 5; 8; 12; 15-16		2-9; 33-34; 36; 38; 49; 55	
5.2	Identifying the Components of the Rhythm	Understand how to determine the ECG rhythm	63% 0:30 2122 *As of: 11/7/17	Matching: Key Term Matching	Parts of an ECG Tracing ECG Rhythm Identification	1; 5; 8; 12; 15-16		2-9; 33-34; 36; 38; 49; 55	
5.2	Identifying the Components of the Rhythm	Understand how to determine the rates	61% 0:23 2131 *As of: 11/7/17	Matching: Key Term Matching	Parts of an ECG Tracing ECG Rhythm Identification	1; 5; 8; 12; 15-16		2-9; 33-34; 36; 38; 49; 55	
5.2	Identifying the Components of the Rhythm	Understand the P wave morphology	70% 0:31 1939 *As of: 11/7/17	Matching: Key Term Matching	Parts of an ECG Tracing ECG Rhythm Identification	1; 5; 8; 12; 15-16		2-9; 33-34; 36; 38; 49; 55	
5.2	Identifying the Components of the Rhythm	Understand the measuring of the PR interval	48% 0:33 2783 *As of: 11/7/17	Matching: Key Term Matching	Parts of an ECG Tracing ECG Rhythm Identification	1; 5; 8; 12; 15-16		2-9; 33-34; 36; 38; 49; 55	
5.2	Identifying the Components of the Rhythm	Understand measuring the QRS duration and analyzing the morphology	57% 0:30 2668 *As of: 11/7/17	Matching: Key Term Matching	Parts of an ECG Tracing ECG Rhythm Identification	1; 5; 8; 12; 15-16		2-9; 33-34; 36; 38; 49; 55	
5.3	Rhythms Originating from the Sinus Node	Know the criteria for classification	56% 0:46 2388 *As of: 11/7/17	Classification: Symptoms of Decreased Cardiac Output Paragraph: Normal Sinus Rhythm	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	2; 10; 17; 21	24-36	10-11; 14-15; 18; 35; 39; 41	
5.3	Rhythms Originating from the Sinus Node	Know how the patient is affected and what you should do about it	61% 0:29 2576 *As of: 11/7/17	Classification: Symptoms of Decreased Cardiac Output Paragraph: Normal Sinus Rhythm	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	2; 10; 17; 21	24-36	10-11; 14-15; 18; 35; 39; 41	
5.4	Sinus Bradycardia	Understand the criteria for classification of sinus bradycardia	69% 0:31 1888 *As of: 11/7/17	Paragraph: Sinus Bradycardia	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	6; 11; 22	24-36	12-13; 16; 32; 40; 47	
5.5	Sinus Tachycardia	Know the definition of sinus tachycardia	64% 0:34 2074 *As of: 11/7/17	Paragraph: Sinus Tachycardia	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	6; 11; 22	24-36	17; 19-21; 42; 46	

CHAPTER 5 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
5.5	Sinus Tachycardia	Know how the patient is affected and what you should do about sinus tachycardia	69% 0:27 1966 *As of: 11/7/17	Paragraph: Sinus Tachycardia	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	6; 11; 22	24-36	17; 19-21; 42; 46	
5.6	Sinus Dysrhythmia	Understand sinus dysrhythmia	59% 0:24 2235 *As of: 11/7/17	Paragraph: Sinus Dysrhythmia	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	3-4; 7; 9; 14; 23	24-36	22-25; 44-45; 48	
5.6	Sinus Dysrhythmia	Understand the criteria for classification of sinus dysrhythmia	64% 0:30 2081 *As of: 11/7/17	Paragraph: Sinus Dysrhythmia	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	3-4; 7; 9; 14; 23	24-36	22-25; 44-45; 48	
5.6	Sinus Dysrhythmia	Know how the patient is affected and what you should do about sinus dysrhythmia	54% 0:30 2422 *As of: 11/7/17	Paragraph: Sinus Dysrhythmia	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	3-4; 7; 9; 14; 23	24-36	22-25; 44-45; 48	
5.7	Sinus Arrest	Understand the criteria for classification of sinus arrest	51% 0:30 2567 *As of: 11/7/17	Paragraph: Sinus Arrest	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	20	24-36	26-31; 43; 50	
5.7	Sinus Arrest	Know how the patient is affected and what you should do about sinus arrest	50% 0:31 2684 *As of: 11/7/17	Paragraph: Sinus Arrest	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	20	24-36	26-31; 43; 50	
5.7	Sinus Arrest		76% 0:37 770 *As of: 11/7/17	Paragraph: Sinus Arrest	Sinus Rhythms [Version a] Sinus Rhythms [Version b] Sinus Rhythms [Version c]	20	24-36	26-31; 43; 50	

CHAPTER 6 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
6.1	Introduction to Atrial Dysrhythmias	Know the causes of atrial dysrhythmias	56% 0:307 2080 *As of: 11/7/17	Paragraph: Introduction to Atrial Dysrhythmias		1; 4; 20; 23		1-2; 46-47	
6.1	Introduction to Atrial Dysrhythmias	Understand how atrial dysrhythmias occur	45% 0:28 2328 *As of: 11/7/17	Paragraph: Introduction to Atrial Dysrhythmias		1; 4; 20; 23		1-2; 46-47	
6.2	Premature Atrial Complexes	Define premature atrial complexes	75% 0:25 1607 *As of: 11/7/17	Paragraph: Premature Atrial Complexes (PACs)	Atrial Rhythms [Version a] Atrial Rhythms [Version b] Atrial Rhythms [Version c]	2-3; 7; 9; 19	27-37	3-6; 32-33-35; 45	
6.2	Premature Atrial Complexes	Understand the criteria for classification of premature atrial complexes	48% 0:35 2292 *As of: 11/7/17	Paragraph: Premature Atrial Complexes (PACs)	Atrial Rhythms [Version a] Atrial Rhythms [Version b] Atrial Rhythms [Version c]	2-3; 7; 9; 19	27-37	3-6; 32-33-35; 45	
6.2	Premature Atrial Complexes	Understand additional criteria for premature atrial complexes	56% 0:21 2082 *As of: 11/7/17	Paragraph: Premature Atrial Complexes (PACs)	Atrial Rhythms [Version a] Atrial Rhythms [Version b] Atrial Rhythms [Version c]	2-3; 7; 9; 19	27-37	3-6; 32-33-35; 45	
6.2	Premature Atrial Complexes	Know what a PAC is	51% 0:32 2267 *As of: 11/7/17	Paragraph: Premature Atrial Complexes (PACs)	Atrial Rhythms [Version a] Atrial Rhythms [Version b] Atrial Rhythms [Version c]	2-3; 7; 9; 19	27-37	3-6; 32-33-35; 45	
6.2	Premature Atrial Complexes	Understand the identification of PACs	59% 0:31 2387 *As of: 11/7/17	Paragraph: Premature Atrial Complexes (PACs)	Atrial Rhythms [Version a] Atrial Rhythms [Version b] Atrial Rhythms [Version c]	2-3; 7; 9; 19	27-37	3-6; 32-33-35; 45	
6.2	Premature Atrial Complexes	Define trigeminy	73% 0:24 1616 *As of: 11/7/17	Paragraph: Premature Atrial Complexes (PACs)	Atrial Rhythms [Version a] Atrial Rhythms [Version b] Atrial Rhythms [Version c]	2-3; 7; 9; 19	27-37	3-6; 32-33-35; 45	
6.2	Premature Atrial Complexes	Determine what healthcare providers should know about caring for patients with PACs	55% 0:30 2352 *As of: 11/7/17	Paragraph: Premature Atrial Complexes (PACs)	Atrial Rhythms [Version a] Atrial Rhythms [Version b] Atrial Rhythms [Version c]	2-3; 7; 9; 19	27-37	3-6; 32-33-35; 45	
6.3	Wandering Atrial Pacemaker	Define wandering atrial pacemakers	72% 0:29 1643 *As of: 11/7/17	Paragraph: Wandering Atrial Pacemaker (WAP) Classification: Wandering Atrial Pacemaker (WAP)		13; 18; 26	27-37	7-9; 11; 36; 44; 48-49; 52	
6.3	Wandering Atrial Pacemaker	Know the criteria for classification of wandering atrial pacemakers	35% 0:32 4224 *As of: 11/7/17	Paragraph: Wandering Atrial Pacemaker (WAP) Classification: Wandering Atrial Pacemaker (WAP)		13; 18; 26	27-37	7-9; 11; 36; 44; 48-49; 52	
6.3	Wandering Atrial Pacemaker	Understand how patients are affected by wandering atrial pacemakers	62% 0:31 2160 *As of: 11/7/17	Paragraph: Wandering Atrial Pacemaker (WAP) Classification: Wandering Atrial Pacemaker (WAP)		13; 18; 26	27-37	7-9; 11; 36; 44; 48-49; 52	

CHAPTER 6 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
6.4	Multifocal Atrial Tachycardia	Define multifocal atrial tachycardia	61% 0:31 2006 *As of: 11/7/17	Paragraph: Multifocal Atrial Tachycardia (MAT)		14; 21; 26	27-37	10; 12-15; 37; 51	
6.4	Multifocal Atrial Tachycardia	Understand the criteria for classification of multifocal atrial tachycardia rhythms	39% 0:32 4209 *As of: 11/7/17	Paragraph: Multifocal Atrial Tachycardia (MAT)		14; 21; 26	27-37	10; 12-15; 37; 51	
6.4	Multifocal Atrial Tachycardia	Understand how patients are affected by multifocal and tachycardia rhythms	74% 0:32 1619 *As of: 11/7/17	Paragraph: Multifocal Atrial Tachycardia (MAT)		14; 21; 26	27-37	10; 12-15; 37; 51	
6.5	Atrial Flutter	Understand atrial flutters	73% 0:29 1676 *As of: 11/7/17	Matching: Key Term Matching Paragraph: Atrial Flutter		5-6; 16; 22; 24	27-37	16-21; 31; 34; 38; 43	
6.5	Atrial Flutter	Understand the criteria for classification of atrial flutters	49% 0:33 2432 *As of: 11/7/17	Matching: Key Term Matching Paragraph: Atrial Flutter		5-6; 16; 22; 24	27-37	16-21; 31; 34; 38; 43	
6.5	Atrial Flutter	Understand how patients are affected with atrial flutters	63% 0:28 1915 *As of: 11/7/17	Matching: Key Term Matching Paragraph: Atrial Flutter		5-6; 16; 22; 24	27-37	16-21; 31; 34; 38; 43	
6.5	Atrial Flutter	Describe how the healthcare professional should respond to atrial flutters	71% 0:38 1905 *As of: 11/7/17	Matching: Key Term Matching Paragraph: Atrial Flutter		5-6; 16; 22; 24	27-37	16-21; 31; 34; 38; 43	
6.6	Atrial Fibrillation	Describe atrial fibrillation	55% 0:32 2244 *As of: 11/7/17	Paragraph: Atrial Fibrillation		8; 10-12; 15; 17; 25	27-37	22-30; 39-42; 50	
6.6	Atrial Fibrillation	Understand the causes of atrial fibrillation	75% 0:25 1601 *As of: 11/7/17	Paragraph: Atrial Fibrillation		8; 10-12; 15; 17; 25	27-37	22-30; 39-42; 50	
6.6	Atrial Fibrillation	Understand the criteria for classification of atrial fibrillation	44% 0:34 3358 *As of: 11/7/17	Paragraph: Atrial Fibrillation		8; 10-12; 15; 17; 25	27-37	22-30; 39-42; 50	
6.6	Atrial Fibrillation	Understand how atrial fibrillation affects patients	50% 0:38 2332 *As of: 11/7/17	Paragraph: Atrial Fibrillation		8; 10-12; 15; 17; 25	27-37	22-30; 39-42; 50	

CHAPTER 7 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
7.1	Introduction to Junctional Dysrhythmias	Describe the AV junction	75% 0:30 1116 *As of: 11/7/17	Paragraph: Introduction to Junctional Dysrhythmias		1; 10		1-5; 37; 45; 46	
7.1	Introduction to Junctional Dysrhythmias	Understand the features of junctional rhythms	61% 0:32 1747 *As of: 11/7/17	Paragraph: Introduction to Junctional Dysrhythmias		1; 10		1-5; 37; 45; 46	
7.2	Premature Junctional Complex (PJC)	Describe premature junctional complexes	60% 0:29 1833 *As of: 11/7/17	Paragraph: Premature Junctional Complex	Junctional Dysrhythmias [Version a] Junctional Dysrhythmias [Version c]	7	11-22	6-8; 29-30; 39; 49-50	
7.2	Premature Junctional Complex (PJC)	Understand the criteria for classification of premature junctional complexes	48% 0:37 2619 *As of: 11/7/17	Paragraph: Premature Junctional Complex	Junctional Dysrhythmias [Version a] Junctional Dysrhythmias [Version c]	7	11-22	6-8; 29-30; 39; 49-50	
7.2	Premature Junctional Complex (PJC)	Understand how patients are affected by premature junctional complexes	51% 0:35 1921 *As of: 11/7/17	Paragraph: Premature Junctional Complex	Junctional Dysrhythmias [Version a] Junctional Dysrhythmias [Version c]	7	11-22	6-8; 29-30; 39; 49-50	
7.3	Junctional Escape Rhythm		76% 0:37 770 *As of: 11/7/17	Paragraph: Junctional Escape Rhythm	Junctional Dysrhythmias [Version a] Junctional Dysrhythmias [Version b] Junctional Dysrhythmias [Version c]	8	11-22	9-12; 32; 38; 40	
7.3	Junctional Escape Rhythm	Describe junctional escape rhythms	55% 0:31 2035 *As of: 11/7/17	Paragraph: Junctional Escape Rhythm	Junctional Dysrhythmias [Version a] Junctional Dysrhythmias [Version b] Junctional Dysrhythmias [Version c]	8	11-22	9-12; 32; 38; 40	
7.3	Junctional Escape Rhythm	Understand criteria for classification of junctional escape rhythms	45% 0:34 2400 *As of: 11/7/17	Paragraph: Junctional Escape Rhythm	Junctional Dysrhythmias [Version a] Junctional Dysrhythmias [Version b] Junctional Dysrhythmias [Version c]	8	11-22	9-12; 32; 38; 40	
7.3	Junctional Escape Rhythm	Understand how patients are affected by premature junctional escape rhythms	58% 0:34 1826 *As of: 11/7/17	Paragraph: Junctional Escape Rhythm	Junctional Dysrhythmias [Version a] Junctional Dysrhythmias [Version b] Junctional Dysrhythmias [Version c]	8	11-22	9-12; 32; 38; 40	
7.4	Accelerated Junctional Rhythm	Describe accelerated junctional rhythms	49% 0:37 2259 *As of: 11/7/17	Paragraph: Accelerated Junctional Rhythm		9	11-22	13-15; 41; 43-44	
7.4	Accelerated Junctional Rhythm	Understand the criteria for classification of accelerated junctional rhythms	48% 0:30 2069 *As of: 11/7/17	Paragraph: Accelerated Junctional Rhythm		9	11-22	13-15; 41; 43-44	

CHAPTER 7 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
7.4	Accelerated Junctional Rhythm	Understand how patients are affected by accelerated junctional rhythms	40% 0:39 2546 *As of: 11/7/17	Paragraph: Accelerated Junctional Rhythm		9	11-22	13-15; 41; 43-44	
7.5	Junctional Tachycardia	Understand the criteria for classification of junctional tachycardia in terms of rhythm	59% 0:30 1751 *As of: 11/7/17	Paragraph: Junctional Tachycardia Rhythm	Junctional Dysrhythmias [Version b]		11-22	16-20; 33; 42	
7.5	Junctional Tachycardia	Understand the classification of criteria for junctional tachycardia	43% 0:37 2902 *As of: 11/7/17	Paragraph: Junctional Tachycardia Rhythm	Junctional Dysrhythmias [Version b]		11-22	16-20; 33; 42	
7.5	Junctional Tachycardia	Understand how the patient is affected by junctional tachycardia	71% 0:39 1551 *As of: 11/7/17	Paragraph: Junctional Tachycardia Rhythm	Junctional Dysrhythmias [Version b]		11-22	16-20; 33; 42	
7.6	Supraventricular Tachycardia (SVT)	Describe supraventricular tachycardia	73% 0:29 1468 *As of: 11/7/17	Paragraph: Supraventricular Tachycardia		2-6	11-22	21-28; 31; 35-36; 47-48	
7.6	Supraventricular Tachycardia (SVT)	Understand the identification of supraventricular tachycardia	47% 0:32 2269 *As of: 11/7/17	Paragraph: Supraventricular Tachycardia		2-6	11-22	21-28; 31; 35-36; 47-48	
7.6	Supraventricular Tachycardia (SVT)	Know how to classify the rhythms in supraventricular tachycardia	63% 0:27 1250 *As of: 11/7/17	Paragraph: Supraventricular Tachycardia		2-6	11-22	21-28; 31; 35-36; 47-48	
7.6	Supraventricular Tachycardia (SVT)	Understand the criteria for classification of supraventricular tachycardia in terms of rhythm	52% 0:28 2014 *As of: 11/7/17	Paragraph: Supraventricular Tachycardia		2-6	11-22	21-28; 31; 35-36; 47-48	
7.6	Supraventricular Tachycardia (SVT)	Understand the criteria for classification of supraventricular tachycardia	38% 0:33 3115 *As of: 11/7/17	Paragraph: Supraventricular Tachycardia		2-6	11-22	21-28; 31; 35-36; 47-48	
7.6	Supraventricular Tachycardia (SVT)	Understand how patients are affected by supraventricular dysrhythmias	68% 0:31 1557 *As of: 11/7/17	Paragraph: Supraventricular Tachycardia		2-6	11-22	21-28; 31; 35-36; 47-48	

CHAPTER 8 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
8.1	Introduction to Heart Block Dysrhythmias	Know heart block dysrhythmias	71% 0:30 1601 *As of: 11/7/17	Paragraph: Introduction to Heart Block Dysrhythmias				1; 41	
8.2	First Degree Atrioventricular (AV) Block	Understand first degree atrioventricular (AV) block	63% 0:26 1778 *As of: 11/7/17	Paragraph: First Degree Atrioventricular (AV) Block	Heart Block Dysrhythmias [Version a] Heart Block Dysrhythmias [Version b] Heart Block Dysrhythmias [Version c]	1; 5; 7; 9; 11	14-26	2-8; 35; 38-39; 42	
8.3	Second Degree Atrioventricular (AV) Block, Type I (Mobitz I or Wenckebach)	Understand second degree atrioventricular (AV) block, type I (Mobitz or Wenckebach)	57% 0:28 2006 *As of: 11/7/17	Classification: Second Degree Atrioventricular (AV) Block Paragraph: Second Degree Atrioventricular (AV) Block		2; 5; 8; 11-12	14-26	9-17; 40; 45; 48	
8.3	Second Degree Atrioventricular (AV) Block, Type I (Mobitz I or Wenckebach)	Understand the criteria for classification of second degree AV blocks	63% 0:28 1729 *As of: 11/7/17	Classification: Second Degree Atrioventricular (AV) Block Paragraph: Second Degree Atrioventricular (AV) Block		2; 5; 8; 11-12	14-26	9-17; 40; 45; 48	
8.3	Second Degree Atrioventricular (AV) Block, Type I (Mobitz or Wenckebach)	Know how the patient is affected and what you should know about second degree heart block	69% 0:37 1641 *As of: 11/7/17	Classification: Second Degree Atrioventricular (AV) Block Paragraph: Second Degree Atrioventricular (AV) Block		2; 5; 8; 11-12	14-26	9-17; 40; 45; 48	
8.4	Second Degree Atrioventricular (AV) Block, Type II (Mobitz II)	Understand second degree atrioventricular (AV) block, type II (Mobitz II)	63% 0:28 1779 *As of: 11/7/17	Paragraph: Second Degree Atrioventricular (AV) Block		3; 5; 8; 10-12	14-26	18-26; 43-44; 47	
8.4	Second Degree Atrioventricular (AV) Block, Type II (Mobitz II)	Understand the criteria for classification of Mobitz II, second degree atrioventricular (AV) block	65% 0:32 1671 *As of: 11/7/17	Paragraph: Second Degree Atrioventricular (AV) Block		3; 5; 8; 10-12	14-26	18-26; 43-44; 47	
8.4	Second Degree Atrioventricular (AV) Block, Type II (Mobitz II)	Know how the patient is affected and what you should do about second degree atrioventricular (AV) block, Mobitz II	60% 0:36 1759 *As of: 11/7/17	Paragraph: Second Degree Atrioventricular (AV) Block		3; 5; 8; 10-12	14-26	18-26; 43-44; 47	
8.5	Third Degree Atrioventricular (AV) Block (Complete)	Understand third degree atrioventricular (AV) block (complete)	45% 0:30 1817 *As of: 11/7/17	Paragraph: Third Degree Atrioventricular (AV) Block		4; 5-6; 8; 11; 13	14-26	27-34; 36-37; 46; 49-50	
8.5	Third Degree Atrioventricular (AV) Block (Complete)	Understand the criteria for classification of a third degree atrioventricular (AV) block (complete)	58% 0:33 2291 *As of: 11/7/17	Paragraph: Third Degree Atrioventricular (AV) Block		4; 5-6; 8; 11; 13	14-26	27-34; 36-37; 46; 49-50	
8.5	Third Degree Atrioventricular (AV) Block (Complete)	Know how the patient is affected and what you should do about third degree (complete) heart block	63% 0:35 2018 *As of: 11/7/17	Paragraph: Third Degree Atrioventricular (AV) Block		4; 5-6; 8; 11; 13	14-26	27-34; 36-37; 46; 49-50	

CHAPTER 9 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
9.1	Introduction to Ventricular Dysrhythmias	Define ventricular dysrhythmias		Paragraph: Introduction to Ventricular Dysrhythmias		5; 6; 12-22		1-6	
9.2	Premature Ventricular Complexes (PVCs)	Understand premature ventricular complexes (PVCs)		Matching: Type and Pattern of Premature Complexes Classification - Premature Ventricular Complexes Paragraph - Premature Ventricular Complexes	Premature Ventricular Complexes - Part 1 [Version a] Premature Ventricular Complexes - Part 1 [Version b] Premature Ventricular Complexes - Part 1 [Version c] Premature Ventricular Complexes - Part 2 [Version a] Premature Ventricular Complexes - Part 2 [Version b] Premature Ventricular Complexes - Part 2 [Version c]	1; 8; 12-22	23-42	7-16; 47; 49	
9.2	Premature Ventricular Complexes (PVCs)	Understand the criteria for classification of premature ventricular complexes		Matching: Type and Pattern of Premature Complexes Classification - Premature Ventricular Complexes Paragraph - Premature Ventricular Complexes	Premature Ventricular Complexes - Part 1 [Version a] Premature Ventricular Complexes - Part 1 [Version b] Premature Ventricular Complexes - Part 1 [Version c] Premature Ventricular Complexes - Part 2 [Version a] Premature Ventricular Complexes - Part 2 [Version b] Premature Ventricular Complexes - Part 2 [Version c]	1; 8; 12-22	23-42	7-16; 47; 49	
9.2	Premature Ventricular Complexes (PVCs)	Know how the patient is affected and what you should know about premature ventricular complexes		Matching: Type and Pattern of Premature Complexes Classification - Premature Ventricular Complexes Paragraph - Premature Ventricular Complexes	Premature Ventricular Complexes - Part 1 [Version a] Premature Ventricular Complexes - Part 1 [Version b] Premature Ventricular Complexes - Part 1 [Version c] Premature Ventricular Complexes - Part 2 [Version a] Premature Ventricular Complexes - Part 2 [Version b] Premature Ventricular Complexes - Part 2 [Version c]	1; 8; 12-22	23-42	7-16; 47; 49	
9.3	Agonal Rhythm	Understand agonal rhythm		Paragraph: Agonal Rhythm		1; 3	23-43	17-19; 33	
9.3	Agonal Rhythm	Understand the criteria for classification of agonal rhythm		Paragraph: Agonal Rhythm		1; 3	23-43	17-19; 33	
9.4	Idioventricular Rhythm	Understand idioventricular rhythm		Paragraph: Idioventricular Rhythm	Ventricular Dysrhythmias [Version a] Ventricular Dysrhythmias [Version b] Ventricular Dysrhythmias [Version c]	1; 4; 9	23-43	20; 39-40; 50	
9.4	Idioventricular Rhythm	Understand the criteria for classification of idioventricular rhythm		Paragraph: Idioventricular Rhythm	Ventricular Dysrhythmias [Version a] Ventricular Dysrhythmias [Version b] Ventricular Dysrhythmias [Version c]	1; 4; 9	23-43	20; 39-40; 50	

CHAPTER 9 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
9.4	Idioventricular Rhythm	Know how the patient is affected and what you should know about idioventricular rhythm		Paragraph: Idioventricular Rhythm	Ventricular Dysrhythmias [Version a] Ventricular Dysrhythmias [Version b] Ventricular Dysrhythmias [Version c]	1; 4; 9	23-43	20; 39-40; 50	
9.5	Accelerated Idioventricular Rhythm	Understand accelerated idioventricular rhythm		Paragraph: Accelerated Idioventricular Rhythm	Ventricular Dysrhythmias [Version a] Ventricular Dysrhythmias [Version b] Ventricular Dysrhythmias [Version c]	1; 2; 9	23-43	21-23; 42-43	
9.5	Accelerated Idioventricular Rhythm	Understand the criteria for classification of accelerated idioventricular rhythm		Paragraph: Accelerated Idioventricular Rhythm	Ventricular Dysrhythmias [Version a] Ventricular Dysrhythmias [Version b] Ventricular Dysrhythmias [Version c]	1; 2; 9	23-43	21-23; 42-43	
9.5	Accelerated Idioventricular Rhythm	Know how the patient is affected and what you should know when a patient is in accelerated idioventricular rhythm		Paragraph: Accelerated Idioventricular Rhythm	Ventricular Dysrhythmias [Version a] Ventricular Dysrhythmias [Version b] Ventricular Dysrhythmias [Version c]	1; 2; 9	23-43	21-23; 42-43	
9.6	Ventricular Tachycardia	Understand ventricular tachycardia		Paragraph: Ventricular Tachycardia		1; 11	23-43	24-26; 30; 44	
9.6	Ventricular Tachycardia	Understand the criteria for classification of ventricular tachycardia		Paragraph: Ventricular Tachycardia		1; 11	23-43	24-26; 31; 44	
9.6	Ventricular Tachycardia	Know how the patient is affected and what you should know about ventricular tachycardia		Paragraph: Ventricular Tachycardia		1; 11	23-43	24-26; 31; 44	
9.7	Ventricular Fibrillation	Understand ventricular fibrillation		Paragraph: Ventricular Fibrillation		1; 7; 11	23-43	27-31; 36-38	
9.7	Ventricular Fibrillation	Understand the criteria for classification for ventricular fibrillation		Paragraph: Ventricular Fibrillation		1; 7; 11	23-43	27-31; 36-38	
9.7	Ventricular Fibrillation	Know how the patient is affected and what you should know about ventricular fibrillation		Paragraph: Ventricular Fibrillation		1; 7; 11	23-43	27-31; 36-38	
9.8	Asystole	Understand asystole		Paragraph: Asystole		1; 10	23-43	32-35; 45-46; 48	
9.8	Asystole	Understand classification of asystole		Paragraph: Asystole		1; 10	23-43	32-35; 45-46; 48	

CHAPTER 10 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
10.1	Introduction to Bundle Branch Block Dysrhythmias	Know what bundle branch block dysrhythmias are	40% 0:37 2021 *As of: 11/7/17	Paragraph: Introduction to Bundle Branch Block Sequencing: Introduction to Bundle Branch Block		2; 4-11	22-28	1-14	
10.1	Introduction to Bundle Branch Block Dysrhythmias	Understand the criteria for classification of BBB	69% 0:26 1162 *As of: 11/7/17	Paragraph: Introduction to Bundle Branch Block Sequencing: Introduction to Bundle Branch Block		2; 4-11	22-28	1-14	
10.1	Introduction to Bundle Branch Block Dysrhythmias	Understand how the patient is affected and what you should know with BBB	67% 0:22 1235 *As of: 11/7/17	Paragraph: Introduction to Bundle Branch Block Sequencing: Introduction to Bundle Branch Block		2; 4-11	22-28	1-14	
10.2	Introduction to Bundle Branch Block Dysrhythmias	Understand bundle branch block	51% 0:30 2148 *As of: 11/7/17	Paragraph: RBBB vs. LBBB Paragraph: Bundle Branch Block - Cause and Effects	Bundle Branch Block	1; 3; 12-21		15-18	

CHAPTER 11 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
11.1	Introduction to Pacemaker Rhythms	Understand pacemaker rhythms	50% 0:31 1968 *As of: 11/7/17	Labeling: Introduction to Pacemaker Rhythms Paragraph: Introduction to Pacemaker Rhythms	Pacemaker Rhythms [Version a] Pacemaker Rhythms [Version b] Pacemaker Rhythms [Version c]	8-10		1-6; 17-18; 26-27; 35	
11.2	Evaluating Pacemaker Function	Know how to evaluate pacemaker function	45% 0:27 2035 *As of: 11/7/17	Labeling: Evaluating Pacemaker Function Paragraph: Evaluating Pacemaker Function		1-5	20-25	7-10; 16; 19-21; 24; 28; 31; 33-34; 37-38	
11.2	Evaluating Pacemaker Function	Understand the pacing spike	69% 0:25 1281 *As of: 11/7/17	Labeling: Evaluating Pacemaker Function Paragraph: Evaluating Pacemaker Function		1-5	20-25	7-10; 16; 19-21; 24; 28; 31; 33-34; 37-38	
11.2	Evaluating Pacemaker Function	Know what an AV delay is	64% 0:33 1409 *As of: 11/7/17	Labeling: Evaluating Pacemaker Function Paragraph: Evaluating Pacemaker Function		1-5	20-25	7-10; 16; 19-21; 24; 28; 31; 33-34; 37-38	
11.2	Evaluating Pacemaker Function	Understand how to evaluate a pacemaker ECG tracing	42% 0:36 902 *As of: 11/7/17	Labeling: Evaluating Pacemaker Function Paragraph: Evaluating Pacemaker Function		1-5	20-25	7-10; 16; 19-21; 24; 28; 31; 33-34; 37-38	
11.3	Pacemaker Complications Relative to the ECG Tracing	Understand pacemaker complications relative to the ECG tracing	39% 0:26 2382 *As of: 11/7/17	Matching: Key Term Matching Paragraph: Pacemaker Complications Relative to the ECG Tracing		6-7; 11-19		14-17; 39-40	

CHAPTER 12 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
12.1	Cardiac Stress Testing	Describe exercise electrocardiography	71% 0:28 850 *As of: 11/7/17	Paragraph: What is Exercise Electrocardiography?		30; 35		1-7	
12.1	Cardiac Stress Testing	Describe the types of exercise electrocardiography	51% 0:28 944 *As of: 11/7/17	Paragraph: What is Exercise Electrocardiography?		30; 35		1-7	
12.1	Cardiac Stress Testing	Understand the healthcare professional's role in exercise electrocardiography	67% 0:29 986 *As of: 11/7/17	Paragraph: What is Exercise Electrocardiography?		30; 35		1-7	
12.2	Why is Exercise Electrocardiography Used?	Understand the purpose of exercise electrocardiography	71% 0:25 847 *As of: 11/7/17	Matching I: Key Term Matching Matching II: Key Term Matching Paragraph: Why is Exercise Electrocardiography Used?		17; 21; 25		8-13	
12.2	Why is Exercise Electrocardiography Used?	Know why exercise electrocardiography is performed	58% 0:32 1096 *As of: 11/7/17	Matching I: Key Term Matching Matching II: Key Term Matching Paragraph: Why is Exercise Electrocardiography Used?		17; 21; 25		8-13	
12.2	Why is Exercise Electrocardiography Used?	Understand other uses for exercise electrocardiography	40% 0:34 1835 *As of: 11/7/17	Matching I: Key Term Matching Matching II: Key Term Matching Paragraph: Why is Exercise Electrocardiography Used?		17; 21; 25		8-13	
12.3	Other Types of Cardiac Stress Testing	Understand chemical stress testing	50% 0:26 1114 *As of: 11/7/17			3; 16; 20; 23; 26		14-17; 39-41; 51-52	
12.3	Other Types of Cardiac Stress Testing	Understand chemical stress echocardiogram testing	41% 0:31 1644 *As of: 11/7/17			3; 16; 20; 23; 26		14-17; 39-41; 51-52	
12.4	Preparing the Patient for Exercise Electrocardiography	Understand how patient's should be prepared for exercise electrocardiography	69% 0:27 865 *As of: 11/7/17	Paragraph: Preparing the Patient for Exercise Electrocardiography		8-9; 13; 19	36-37; 39	18-23; 27	
12.5	Providing Safety	Understand how healthcare professionals can provide patient safety during exercise electrocardiography	63% 0:32 1013 *As of: 11/7/17	Paragraph: Providing Safety		1-2; 5-6; 18; 24		24-25; 42-44; 50	
12.6	Performing Exercise Electrocardiography	Know how to perform exercise electrocardiography	74% 0:22 801 *As of: 11/7/17	Labeling: Place the Electrodes in their Proper Positions Paragraph: Performing Exercise Electrocardiography	Assisting with Exercise Electrocardiography	4; 7; 10; 14-15	37	26; 28-30; 48-49	
12.6	Performing Exercise Electrocardiography	Describe how to perform exercise electrocardiography	34% 0:43 1627 *As of: 11/7/17	Labeling: Place the Electrodes in their Proper Positions Paragraph: Performing Exercise Electrocardiography	Assisting with Exercise Electrocardiography	4; 7; 10; 14-15	37	26; 28-30; 48-49	

CHAPTER 12 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
12.7	Common Protocols	Describe common protocols in exercise electrocardiography	53% 0:34 1299 *As of: 11/7/17	Paragraph: Common Protocols		22; 28; 31-33		31-34; 37-38	
12.7	Common Protocols	Understand the goals in performing exercise electrocardiography	63% 0:30 978 *As of: 11/7/17	Paragraph: Common Protocols		22; 28; 31-33		31-34; 37-38	
12.7	Common Protocols	Understand rate pressure product	51% 0:31 1440 *As of: 11/7/17	Paragraph: Common Protocols		22; 28; 31-33		31-34; 37-38	
12.8	After Exercise Electrocardiography	Know the process for after exercise electrocardiography	59% 0:34 1326 *As of: 11/7/17	Paragraph: After Exercise Electrocardiography		11-12; 27; 34	38	35-36; 45-47; 53	
12.8	After Exercise Electrocardiography	Know alternative reasons for an exercise electrocardiography test that is not normal	50% 0:33 1046 *As of: 11/7/17	Paragraph: After Exercise Electrocardiography		11-12; 27; 34	38	35-36; 45-47; 53	
12.8	After Exercise Electrocardiography	Discuss post-exercise electrocardiography instructions	74% 0:31 874 *As of: 11/7/17	Paragraph: After Exercise Electrocardiography		11-12; 27; 34	38	35-36; 45-47; 53	
12.8	After Exercise Electrocardiography	Understand the role of a healthcare provider in the event of a false positive exercise electrocardiography	68% 0:24 878 *As of: 11/7/17	Paragraph: After Exercise Electrocardiography		11-12; 27; 34	38	35-36; 45-47; 53	

CHAPTER 13 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
13.1	Ambulatory Monitoring	Describe the process of ambulatory monitoring	73% 0:29 849 *As of: 11/7/17	Matching: Key Term Matching Paragraph: What is Ambulatory Monitoring		14; 16; 19		1-4; 43	
13.1	Ambulatory Monitoring	Understand the process of ambulatory monitoring	59% 0:33 977 *As of: 11/7/17	Matching: Key Term Matching Paragraph: What is Ambulatory Monitoring		14; 16; 19		1-4; 43	
13.2	How is Ambulatory Monitoring Used?	Know how ambulatory monitoring is used	68% 0:27 876 *As of: 11/7/17			15; 18; 22		5-8; 13; 44-45	
13.2	How is Ambulatory Monitoring Used?	Understand how ambulatory monitoring is used	53% 0:35 935 *As of: 11/7/17			15; 18; 22		5-8; 13; 44-45	
13.3	Types of Ambulatory Monitoring	Understand the functions and variations of ambulatory monitoring	45% 0:37 1090 *As of: 11/7/17	Paragraph: How is Ambulatory Monitoring Used? Paragraph: Types of Ambulatory Monitoring		17; 20-21; 28-29; 31-32		9-12; 14-16; 46-48	
13.3	Types of Ambulatory Monitoring	Understand telemetry monitoring	54% 0:29 861 *As of: 11/7/17	Paragraph: How is Ambulatory Monitoring Used? Paragraph: Types of Ambulatory Monitoring		17; 20-21; 28-29; 31-32		9-12; 14-16; 46-48	
13.3	Types of Ambulatory Monitoring	Understand transtelephonic monitoring	61% 0:33 1046 *As of: 11/7/17	Paragraph: How is Ambulatory Monitoring Used? Paragraph: Types of Ambulatory Monitoring		17; 20-21; 28-29; 31-32		9-12; 14-16; 46-48	
13.3	Types of Ambulatory Monitoring	Understand the patient's role with transtelephonic monitoring	48% 0:34 1099 *As of: 11/7/17	Paragraph: How is Ambulatory Monitoring Used? Paragraph: Types of Ambulatory Monitoring		17; 20-21; 28-29; 31-32		9-12; 14-16; 46-48	
13.3	Types of Ambulatory Monitoring	Describe elements of transtelephonic monitor devices	66% 0:32 895 *As of: 11/7/17	Paragraph: How is Ambulatory Monitoring Used? Paragraph: Types of Ambulatory Monitoring		17; 20-21; 28-29; 31-32		9-12; 14-16; 46-48	
13.4	Educating the Patient	Know the healthcare professional's responsibility with patient education for Holter monitoring	66% 0:30 922 *As of: 11/7/17	Paragraph: Educating the Patient		23-27; 30	38	17-22; 39	
13.4	Educating the Patient	Define the patient diary for Holter monitoring	70% 0:31 786 *As of: 11/7/17	Paragraph: Educating the Patient		23-27; 30	38	17-22; 39	
13.4	Educating the Patient	Understand the diary recording procedure	52% 0:31 1426 *As of: 11/7/17	Paragraph: Educating the Patient		23-27; 30	38	17-22; 39	

CHAPTER 13 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
13.4	Educating the Patient	Know how to instruct a patient how to dress for a Holter monitor test	50% 0:32 1523 *As of: 11/7/17	Paragraph: Educating the Patient		23-27; 30	38	17-22; 39	
13.4	Educating the Patient	Know how to instruct a patient to care for a Holter monitor during testing	66% 0:31 891 *As of: 11/7/17	Paragraph: Educating the Patient		23-27; 30	38	17-22; 39	
13.6	Applying an Ambulatory Monitor	Know the equipment required for application of the ambulatory monitor	53% 0:28 1070 *As of: 11/7/17	Ordering: Applying an Ambulatory Monitor Paragraph: Applying an Ambulatory Monitor	Applying and Removing an Ambulatory (Holter) Monitor	1-13	36	26-31; 40-41	
13.6	Applying an Ambulatory Monitor	Understand lead placement and lead wires in ambulatory testing	50% 0:32 1167 *As of: 11/7/17	Ordering: Applying an Ambulatory Monitor Paragraph: Applying an Ambulatory Monitor	Applying and Removing an Ambulatory (Holter) Monitor	1-13	36	26-31; 40-41	
13.7	Removing an Ambulatory Monitor and Reporting Results	Know the procedure removing an ambulatory monitor	40% 0:44 1713 *As of: 11/7/17	Paragraph: Removing an Ambulatory Monitor		33-35	37; 39	32-38; 49-51	
13.7	Removing an Ambulatory Monitor and Reporting Results	Understand the importance of accurate results in ambulatory testing	58% 0:33 1155 *As of: 11/7/17	Paragraph: Removing an Ambulatory Monitor		33-35	37; 39	32-38; 49-51	

CHAPTER 14 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
14.1	Coronary Arteries	Describe coronary arteries	59% 0:32 963 *As of: 11/7/17	Paragraph: Sentences Dealing with Arteries Animation: Left-Sided Heart Failure Drag and Drop I: Drag Terms for Sentence Completion		8-10	31	1-11	
14.1	Coronary Arteries	Describe the third layer of coronary arteries	45% 0:32 1197 *As of: 11/7/17	Paragraph: Sentences Dealing with Arteries Animation: Left-Sided Heart Failure Drag and Drop I: Drag Terms for Sentence Completion		8-10	31	1-11	
14.2	Cardiac Symptoms	Understand cardiac symptoms	65% 0:32 874 *As of: 11/7/17	Paragraph: Sentences Dealing with Cardiac Symptoms		1-2; 11-12	30; 32	12-18	
14.2	Cardiac Symptoms	Understand unstable angina	52% 0:34 1111 *As of: 11/7/17	Paragraph: Sentences Dealing with Cardiac Symptoms		1-2; 11-12	30; 32	12-18	
14.3	Atypical Patient Presentation	Identify groups of patients who may present with atypical symptoms	66% 0:23 821 *As of: 11/7/17	Paragraph: Sentences Dealing with a Typical Paper Presentation Drag and Drop III: Drag Terms for Sentence Completion		13-15	30	19-26; 41	
14.3	Atypical Patient Presentation	Understand atypical patient presentation in women	54% 0:27 939 *As of: 11/7/17	Paragraph: Sentences Dealing with a Typical Paper Presentation Drag and Drop III: Drag Terms for Sentence Completion		13-15	30	19-26; 41	
14.3	Atypical Patient Presentation	Understand atypical presentation in diabetic patients	68% 0:20 753 *As of: 11/7/17	Paragraph: Sentences Dealing with a Typical Paper Presentation Drag and Drop III: Drag Terms for Sentence Completion		13-15	30	19-26; 41	
14.3	Atypical Patient Presentation	Understand how diabetic patients may present with atypical symptoms	49% 0:29 995 *As of: 11/7/17	Paragraph: Sentences Dealing with a Typical Paper Presentation Drag and Drop III: Drag Terms for Sentence Completion		13-15	30	19-26; 41	
14.3	Atypical Patient Presentation	Understand atypical presentation in elderly patients	45% 0:28 1135 *As of: 11/7/17	Paragraph: Sentences Dealing with a Typical Paper Presentation Drag and Drop III: Drag Terms for Sentence Completion		13-15	30	19-26; 41	
14.4	Acute Coronary Syndrome	Define acute coronary syndrome	55% 0:27 952 *As of: 11/7/17	Drag and Drop II: Drag Terms for Sentence Completion Drag and Drop IV: Drag Terms for Sentence Completion		3; 16-17		27-31; 42-44	
14.4	Acute Coronary Syndrome	Describe ST elevation changes on an ECG	52% 0:28 1095 *As of: 11/7/17	Drag and Drop II: Drag Terms for Sentence Completion Drag and Drop IV: Drag Terms for Sentence Completion		3; 16-17		27-31; 42-44	
14.4	Acute Coronary Syndrome	Understand non-ST segment elevation	56% 0:37 1071 *As of: 11/7/17	Drag and Drop II: Drag Terms for Sentence Completion Drag and Drop IV: Drag Terms for Sentence Completion		3; 16-17		27-31; 42-44	

CHAPTER 14 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
14.4	Acute Coronary Syndrome	Understand sudden cardiac arrest	61% 0:24 889 *As of: 11/7/17	Drag and Drop II: Drag Terms for Sentence Completion Drag and Drop IV: Drag Terms for Sentence Completion		3; 16-17		27-31; 42-44	
14.5	Heart Failure	Understand heart failure	54% 0:35 1099 *As of: 11/7/17	Paragraph: Sentences Dealing with Heart Failure Animation: Left-Sided Heart Failure Animation: Right-Sided Heart Failure Drag and Drop V: Drag Terms for Sentence Completion		5; 18-19		32-36; 45-46	Heart Failure Overview Left Ventricular Failure Right Ventricular Failure
14.5	Heart Failure	Understand left ventricular failure	57% 0:27 1013 *As of: 11/7/17	Paragraph: Sentences Dealing with Heart Failure Animation: Left-Sided Heart Failure Animation: Right-Sided Heart Failure Drag and Drop V: Drag Terms for Sentence Completion		5; 18-19		32-36; 45-46	Heart Failure Overview Left Ventricular Failure Right Ventricular Failure
14.5	Heart Failure	Understand causes of left heart failure	50% 0:33 1263 *As of: 11/7/17	Paragraph: Sentences Dealing with Heart Failure Animation: Left-Sided Heart Failure Animation: Right-Sided Heart Failure Drag and Drop V: Drag Terms for Sentence Completion		5; 18-19		32-36; 45-46	Heart Failure Overview Left Ventricular Failure Right Ventricular Failure
14.5	Heart Failure	Understand the effects of right ventricular failure on the body	67% 0:27 819 *As of: 11/7/17	Paragraph: Sentences Dealing with Heart Failure Animation: Left-Sided Heart Failure Animation: Right-Sided Heart Failure Drag and Drop V: Drag Terms for Sentence Completion		5; 18-19		32-36; 45-46	Heart Failure Overview Left Ventricular Failure Right Ventricular Failure
14.5	Heart Failure	Understand signs, symptoms, and causes of right heart failure	36% 0:35 1614 *As of: 11/7/17	Paragraph: Sentences Dealing with Heart Failure Animation: Left-Sided Heart Failure Animation: Right-Sided Heart Failure Drag and Drop V: Drag Terms for Sentence Completion		5; 18-19		32-36; 45-46	Heart Failure Overview Left Ventricular Failure Right Ventricular Failure
14.6	Cardiac Patient Assessment and Immediate Treatment	Know the O-P-Q-R-S-T mnemonic device for evaluating chest patients	48% 0:35 1141 *As of: 11/7/17	Drag and Drop VI: Drag Terms for Sentence Completion Drag and Drop VII: Drag Terms for Sentence Completion Paragraph: Sentences Dealing with Treatment of Cardiac Patients Drag and Drop: OPQRST Categories		4; 7; 20-23; 26-27	30-32	37-38; 51-54; 61-64	
14.6	Cardiac Patient Assessment and Immediate Treatment	Know the S-A-M-P-L-E mnemonic device for evaluating chest patients	68% 0:24 827 *As of: 11/7/17	Drag and Drop VI: Drag Terms for Sentence Completion Drag and Drop VII: Drag Terms for Sentence Completion Paragraph: Sentences Dealing with Treatment of Cardiac Patients Drag and Drop: OPQRST Categories		4; 7; 20-23; 26-27	30-32	37-38; 51-54; 61-64	

CHAPTER 14 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
14.6	Cardiac Patient Assessment and Immediate Treatment	Understand the S-A-M-P-L-E mnemonic device for evaluating chest patients	68% 0:24 1332 *As of: 11/7/17	Drag and Drop VI: Drag Terms for Sentence Completion Drag and Drop VII: Drag Terms for Sentence Completion Paragraph: Sentences Dealing with Treatment of Cardiac Patients Drag and Drop: OPQRST Categories		4; 7; 20-23; 26-27	30-32	37-38; 51-54; 61-64	
14.6	Cardiac Patient Assessment and Immediate Treatment	Know the immediate response to patients presenting with chest pain	67% 0:24 803 *As of: 11/7/17	Drag and Drop VI: Drag Terms for Sentence Completion Drag and Drop VII: Drag Terms for Sentence Completion Paragraph: Sentences Dealing with Treatment of Cardiac Patients Drag and Drop: OPQRST Categories		4; 7; 20-23; 26-27	30-32	37-38; 51-54; 61-64	
14.6	Cardiac Patient Assessment and Immediate Treatment	Understand the immediate care necessary for patients with chest pain	72% 0:27 763 *As of: 11/7/17	Drag and Drop VI: Drag Terms for Sentence Completion Drag and Drop VII: Drag Terms for Sentence Completion Paragraph: Sentences Dealing with Treatment of Cardiac Patients Drag and Drop: OPQRST Categories		4; 7; 20-23; 26-27	30-32	37-38; 51-54; 61-64	
14.6	Cardiac Patient Assessment and Immediate Treatment	Understand additional treatment that may be necessary for patients with chest pain	42% 0:32 1522 *As of: 11/7/17			4; 7; 20-23; 26-27	30-32	37-38; 51-54; 61-64	
14.6	Cardiac Patient Assessment and Immediate Treatment	Know about coronary angiography	74% 0:29 735 *As of: 11/7/17			4; 7; 20-23; 26-27	30-32	37-38; 51-54; 61-64	
14.7	Treatment Modalities for the Cardiac Patient	Explain the purpose of treatment modalities for the cardiac patient	71% 0:28 764 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	
14.7	Treatment Modalities for the Cardiac Patient	Understand thrombolytic therapy	48% 0:33 1231 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	
14.7	Treatment Modalities for the Cardiac Patient	Know when thrombolytic therapy is appropriate	61% 0:31 878 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	
14.7	Treatment Modalities for the Cardiac Patient	Understand angioplasty and stents	70% 0:26 757 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	
14.7	Treatment Modalities for the Cardiac Patient	Understand coronary artery bypass graft surgery	46% 0:30 964 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	

CHAPTER 14 Challenging Topics <i>(continued)</i>									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
14.7	Treatment Modalities for the Cardiac Patient	Describe coronary artery bypass graft surgery	55% 0:33 1039 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	
14.7	Treatment Modalities for the Cardiac Patient	Understand the purpose of Coumadin clinics	63% 0:32 918 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	
14.7	Treatment Modalities for the Cardiac Patient	Explain EEAP therapy	51% 0:33 991 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	
14.7	Treatment Modalities for the Cardiac Patient	Understand EECF therapy	47% 0:33 1051 *As of: 11/7/17			6; 24-25; 28-29		39-40; 47-50; 55-59; 65-66	

CHAPTER 15 Challenging Topics									
Learning Outcome	Topic	Heat Topic in LS	HeatMap Stats*	Interactive Activities	Strip Exercises	Chapter Review (numbers as listed in text)	Critical Thinking Application (numbers as listed in text)	Test Bank	eBook Videos
15.1	The Views of a Standard 12-Lead ECG and Major Vessels	Identify the views of a standard 12-lead ECG and the major vessels	57% 0:45 1946 *As of: 11/7/17	Classification: The Views of a Standard 12-Lead ECG and Major Vessels Paragraph: The Views of a Standard 12-Lead ECG and Major Vessels	Views from ECG Leads Coronary Circulation	9-17		1-9	
15.2	Ischemia, Injury, and Infarction	Know how to interpret a rhythm strip to identify ischemia, injury, and infarction	54% 0:33 2156 *As of: 11/7/17	Matching: Key Term Matching Labeling: Ischemia, Injury, and Infarction Paragraph: Ischemia, Injury, and Infarction	Infarction Locations [Version a] Infarction Locations [Version b] Infarction Locations [Version c]	4-6; 18-20; 28-29	31-34	10-19; 39-40	
15.3	Electrical Axis	Understand electrical axis	43% 0:26 2776 *As of: 11/7/17	Paragraph: Electrical Axis	Axis Deviation [Version a] Axis Deviation [Version b] Axis Deviation [Version c]	1-2; 7-8; 21-25	35-37	20-29; 34	