

| | 1st ed. | 2nd ed. |
|--|----------------|----------------|
| 1 – Introduction | 1 | 1 |
| How to Use This Book | 2 | 2 |
| The Parts List | 4 | 4 |
| A Day in the Life of Movement | 6 | 6 |
| In the Lab—Mobility in the 21st Century | 12 | 10 |
| | | |
| 2 – The Essentials of Movement | 15 | 13 |
| The Essentials of Movement | 16 | 14 |
| Review Questions | - | 19 |
| | | |
| 3 – Connective Tissue, Part 1 | 23 | 21 |
| The Ubiquitous Material | 24 | 22 |
| In the Lab—A Detour Down the Meat Aisle | 27 | 25 |
| Soft Tissue Properties | 28 | 26 |
| Types of Connective Tissue | 31 | 29 |
| A Connective Tissue Breakdown | 34 | 32 |
| Review Questions | 241–242 | 33 |
| | | |
| 4 – Connective Tissue, Part 2 | 35 | 35 |
| Bone | 36 | 36 |
| Let’s Build a Bone | 37 | 37 |
| In the Lab—Wolff’s Law | 38 | 38 |
| In the Lab—Stacked and Compressed? | 39 | 39 |
| Cartilage | 40 | 40 |
| Fascial Tissues | 41 | 41 |
| Proper Fascia | 42 | 42 |
| Ligament and Tendon | 44 | 44 |
| Other Variations of Fascia | 45 | 45 |
| Putting It All Together | 46 | 46 |
| In the Lab—Local, Global, Internal, and External | 49 | 49 |
| In the Lab—Collagen, Demand, and Flushing | 50 | 50 |
| Review Questions | 241–242 | 51 |
| | | |
| 5 – Joints, Part 1 | 53 | 53 |
| Planes and Axes | 54 | 54 |
| Movements of the Body | 57 | 57 |
| Joints in General | 63 | 63 |
| Let’s Build a Synovial Joint | 66 | 66 |
| Types of Synovial Joints | 69 | 69 |
| Joint Function | 71 | 71 |
| Joint Mobility and Stability | 72 | 72 |
| Joint Chart | 73 | 73 |
| Review Questions | 242 | 74 |

| | 1st ed. | 2nd ed. |
|--|----------------|----------------|
| 6 – Joints, Part 2 | 75 | 75 |
| Range of Motion | 76 | 76 |
| Active and Passive Range of Motion | 77 | 77 |
| Hypermobility and Hypomobility | 79 | 79 |
| End-Feel | 80 | 80 |
| Types of Joint Motion | 82 | 82 |
| Closed and Open Kinetic Chains | 85 | 85 |
| Convex-Concave Rule | 86 | 86 |
| Joint Surface Positions | 87 | 87 |
| Forces Used for Mobilizing Joints | - | 88 |
| Review Questions | 242 | 90 |
| | | |
| 7 – Muscles, Part 1 | 91 | 91 |
| Basics of Muscle Tissue | 92 | 92 |
| Components of Skeletal Muscle | 96 | 96 |
| Let’s Build a Muscle | 98 | 98 |
| Functions of Muscle Tissue | 103 | 103 |
| Properties of Muscle Tissue | 104 | 104 |
| Review Questions | 243 | 105 |
| | | |
| 8 – Muscles, Part 2 | 105 | 107 |
| Shapes and Arrangements of Muscles | 106 | 108 |
| Programming Our Muscle | 110 | 112 |
| Types of Contractile Fibers | 113 | 115 |
| Types of Contractions | 115 | 117 |
| Reverse Actions | 117 | 119 |
| In the Lab—Tight, Short, and Long Muscles | 119 | 121 |
| Review Questions | 243 | 123 |
| | | |
| 9 – Muscles, Part 3 | 121 | 125 |
| Roles of Muscles | 122 | 126 |
| No Muscle Is an Island | 124 | 128 |
| Factors That Affect a Muscle’s Role | 126 | 130 |
| In the Lab—Passive and Active Insufficiency | 128 | 132 |
| In the Lab—The Psoas-less Sit-Up | 129 | 133 |
| In the Lab—Bonus Actions of Muscles | 129 | 133 |
| Postural and Phasic Muscles | 130 | 134 |
| Length and Speed Matter | 133 | 137 |
| Review Questions | 243 | 139 |
| | | |
| 10 – Nerves, Part 1 | 137 | 141 |
| Nerves and Muscles—The Dynamic Duo | 138 | 142 |
| Let’s Build a Neuron | 141 | 145 |
| Peripheral Nerves | 143 | 147 |
| Plexi and Nerve Distribution in the Appendages | 145 | 149 |
| Review Questions | 244 | 155 |

| | 1st ed. | 2nd ed. |
|--|----------------|----------------|
| 11 – Nerves, Part 2 | 151 | 157 |
| Let’s Flip the Switch | 152 | 158 |
| Sensors and Feedback | 153 | 159 |
| I Can’t Shorten If You Don’t Lengthen | 158 | 164 |
| In the Lab—Tonus | 159 | 165 |
| In the Lab—Equilibrium Above All Else | 159 | 165 |
| In the Lab—Reflexes | 159 | 165 |
| Putting It Into Practice | 160 | 166 |
| In the Lab—The Infant and Lifelong Patterns | 165 | 171 |
| In the Lab—Fun in a Doorway | 165 | 171 |
| Review Questions | 244 | 172 |
| | | |
| 12 – Biomechanics, Part 1 | 167 | 173 |
| Biomechanics—The Basics | 168 | 174 |
| Gravity | 171 | 177 |
| Laws of Motion | 172 | 178 |
| Force in Depth | 176 | 182 |
| Torque in Depth | 178 | 185 |
| Review Questions | 245 | 188 |
| | | |
| 13 – Biomechanics, Part 2 | 181 | 189 |
| Levers | 182 | 190 |
| In the Lab—Two-in-One Leverage | - | 195 |
| In the Lab—In the Palm of Your Hand | - | 195 |
| Stability | 186 | 196 |
| Review Questions | 245 | 202 |
| | | |
| 14 – Posture | 191 | 203 |
| Posture and Gait | 192 | 204 |
| Standing Posture | 194 | 206 |
| In the Lab—Other Postural Points-of-View | 196 | 208 |
| In the Lab—Healthy Posture | 196 | 208 |
| The Role of Soft Tissues in Upright Posture | 197 | 209 |
| Building a Myofascial Core | 198 | 210 |
| Building Postural Supporters | 200 | 212 |
| Stability Dysfunction and Pain Patterns | 201 | 213 |
| Upright Postural Distortions | 202 | 214 |
| Other Common Postural Distortions | 205 | 217 |
| In the Lab—Sitting, Bending Over, and Lying Down | 208 | 220 |
| Review Questions | 245–246 | 224 |
| | | |
| 15 – Gait | 213 | 225 |
| Gait | 214 | 226 |
| Stance and Swing Phases | 215 | 227 |
| Gait and the Hips | 218 | 230 |
| In the Lab—Other Factors in Gait | 219 | 231 |

| | 1st ed. | 2nd ed. |
|--|----------------|----------------|
| Muscle Activity During Gait | 220 | 232 |
| In the Lab—Furniture and Clothing | 222 | 234 |
| Abnormal Gaits | 226 | 238 |
| Taking a Look Around | 230 | 242 |
| A Day in the Life of Movement, Part 2 | 234 | 246 |
| Review Questions | 245–246 | 250 |
| | | |
| Index and More | 239 | 251 |
| Answer Key for Review Questions | 247 | 252 |
| To Sit or Stand—The Psoas’s Dilemma | 247 | 252 |
| Joint Range of Motion Chart | 249 | 253 |
| Glossary | 251 | 254 |
| In the Lab—2 Buckets, 2 QLs, and 1 Spine | 250 | 260 |
| In the Lab—Postural Development of the Spine | 250 | 260 |
| In the Lab—Toddler + Car Seat = Core | 250 | 260 |
| In the Lab—The Diaphragm’s Decision | 258 | 261 |
| In the Lab—The Headbang | 258 | 261 |
| Bibliography | 257 | 263 |
| Index | 259 | 265 |