

■ Contents

Chapter 1

Concepts Underlying the Development of Movement	1
Motor Control	1
Postural Control.....	3
Musculoskeletal System	5
Sensory Systems	7
Motor Learning	8
Summary	9
References	10

Chapter 2

Newborn	11
Postural Control.....	11
Gross Motor Development	12
Anatomical/Structural Characteristics	12
Range of Motion	13
Posture and Movement	14
Random Movements	15
Fine Motor Development	16
Anatomical/Structural Characteristics	16
Upper Extremity Development	18
Hand Development	20
Visual Development	20
Oral-Motor and Respiratory Development	21
Anatomical/Structural Characteristics	21
Developmental Characteristics	32
Summary Chart	37
References	38

Chapter 3

1-2 Months	41
Postural Control.....	41
Gross Motor Development	42
Anatomical/Structural Characteristics	42
Posture and Movement	42
Fine Motor Development	44
Upper Extremity Development	44
Hand Development	47
Visual Development	47
Oral-Motor and Respiratory Development	48
Anatomical/Structural Characteristics	48
Developmental Characteristics	49
Summary Chart	52
References	53

Chapter 4

3-5 Months	55
Postural Control.....	55
Gross Motor Development	58
Anatomical and Range of Motion Characteristics	58
Posture and Movement	59
Development of the Feet.....	70
Fine Motor Development	71
Anatomical/Structural Characteristics	71
Upper Extremity Development	72
Hand Development	79
Visual Development	81
Oral-Motor and Respiratory Development	82
Anatomical/Structural Characteristics	82
Developmental Characteristics	86
Summary Chart	92
References	94

Chapter 5

6 Months	95
Postural Control.....	95
Gross Motor Development	96
Fine Motor Development	106
Upper Extremity Development	106
Hand Development	109
Visual Development	111
Oral-Motor and Respiratory Development	113
Anatomical/Structural Characteristics	113
Developmental Characteristics	115
Summary Chart	123
References	125

Chapter 6

7-9 Months	127
Postural Control.....	127
Gross Motor Development	130
Fine Motor Development	150
Upper Extremity Development	151
Hand Development	154
Oral-Motor and Respiratory Development	158
Anatomical/Structural Characteristics	158
Developmental Characteristics	159
Summary Chart	169
References	171

including neuroscience, psychology, and rehabilitation. Motor learning is the process of acquiring motor control is an integral part of this relatively new science. Controversy exists and several models of motor control have been proposed. It is beyond the scope of this book to explore these theories; however, some consensus appears to be generally accepted and provide a basis for understanding the process by which a baby develops motor skills in the first year of life.

Two types of mechanisms that control the execution of a movement have been proposed. A feedback or closed-loop type mechanism is one in which sensory information initiates and/or plays a direct role in the coordination of the movement.

Chapter 7

10-12 Months	173
Postural Control.....	173
Gross Motor Development	175
Fine Motor Development	201
Hand Development	201
Oral-Motor and Respiratory Development	205
Anatomical/Structural Characteristics	205
Developmental Characteristics	208
Summary Chart	218
References	220

Chapter 8

Speech and Language Development	221
<i>Ruth Saletsky Kamen, Ph.D.</i>	
The Neonate	221
One to Two Months	224
Three to Five Months	225
Six to Twelve Months	227
Summary	230
References	231

Glossary	235
-----------------------	------------

Visual Development
Oral-Motor and Respiratory Development
Anatomical/Structural Characteristics
Developmental Characteristics
Summary Chart
References