

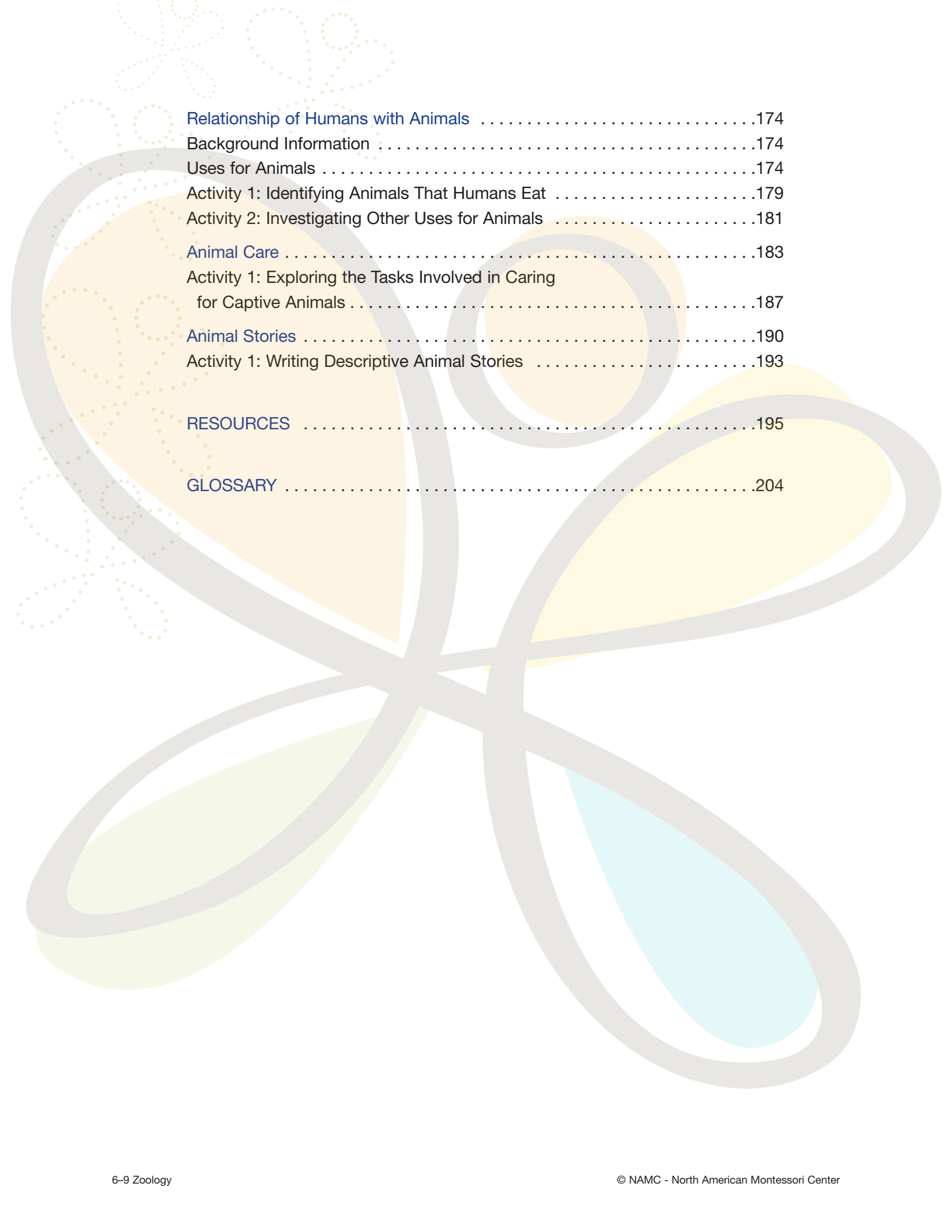


TABLE OF CONTENTS

HOW THIS MANUAL CAN BE USED	1
HOW TO PRESENT ELEMENTARY NOMENCLATURE MATERIAL	3
Activity 1: Matching Picture and Label Cards	4
Activity 2: Matching Picture, Label and Definition Cards	5
INTRODUCTION	7
BASIC OVERVIEW	10
Introduction	10
Living Things	11
Background Information	11
Activity 1: Distinguishing Between Living and Non-Living	16
Activity 2: Identifying What Makes Plants and Animals Organisms	18
Activity 3: Discovering the Basic Differences Between Plants and Animals	20
Animal Study	22
Background Information	22
Domesticated Animals	22
Activity 1: Identifying and Naming Domesticated Animals	24
Aquatic Animals	26
Activity 1: Identifying and Naming Common Aquatic Animals	28
Forest Animals	30
Activity 1: Identifying and Naming Common Forest Animals	33
Birds	35
Activity 1: Identifying and Naming Types of Birds	38
Wild Animals in the World	40
Activity 1: Identifying and Naming Wild Animals from Around the World	42
Animal Young	44
Activity 1: Matching the Names of Young and Adult Animals	46

Activity 2: Investigating How Some Young Animals Are Born or Hatched	.48
CLASSIFICATION AND ANATOMY	.50
Introduction	.50
Classification Overview	.51
Background Information	.51
Activity 1: Examining a Classification Chart	.56
Activity 2: Practicing Basic Classification	.58
Anatomy of Invertebrates	.61
Background Information	.61
Anatomy of an Insect: Class Insecta	.61
Activity 1: Identifying and Naming the Parts of an Insect (Butterfly)	.64
Anatomy of a Spider: Class Arachnida	.66
Activity 1: Identifying and Naming the Parts of an Arachnid	.69
Anatomy of a Crab: Sub-Phylum Crustacea, Class Malacostraca	.71
Activity 1: Identifying and Naming the Parts of a Crustacean	.74
Anatomy of a Mollusk: Phylum Mollusca	.76
Activity 1: Identifying and Naming the Parts of a Mollusk	.78
Anatomy of Vertebrates	.80
Background Information	.80
Anatomy of a Fish: Class Osteichthyes	.80
Activity 1: Identifying and Naming the Parts of a Fish	.84
Anatomy of a Frog: Class Amphibia	.86
Activity 1: Identifying and Naming the Parts of a Frog	.90
Anatomy of a Tortoise: Class Reptilia	.92
Activity 1: Identifying and Naming the Parts of a Tortoise	.95
Anatomy of a Bird: Class Aves	.97
Activity 1: Identifying and Naming the Parts of a Bird	.101
Activity 2: Studying Feathers	.103
Anatomy of a Guinea Pig: Class Mammalia	.104
Activity 1: Identifying and Naming the Parts of a Guinea Pig	.107
Physiology	.109
Background Information	.109
Organ Systems	.109
Activity 1: Studying Organs of the Human Body	.112

Reproduction	113
Background Information	113
Sexual Reproduction	113
Activity 1: Studying the Life Cycle of the Butterfly	118
Activity 2: Studying Courtship Behavior in Animals	120
Asexual Reproduction	121
Activity 1: Making Models of Reproduction by Fission	122
 ADAPTATION	124
Introduction	124
Basic Needs	125
Background Information	125
Food Chains	125
Activity 1: Creating a Simple Food Chain	129
Activity 2: Investigating a Food Chain in More Detail	131
Animal Homes	133
Activity 1: Identifying and Naming Animal Homes	136
Activity 2 : Taking a Field Trip to Find Animal Homes	138
Adapting to Different Climates	140
Background Information	140
How Animals Survive Cold Winters	140
Activity 1: Acting Out How Animals Survive Winter	143
How Animals Adapt to the Arctic Environment	145
Activity 1: Studying Examples of Arctic Animals	149
Activity 2: Investigating Ways Arctic Animals Adapt	151
How Animals Adapt to Grassland Environments	153
Activity 1: Studying Examples of Grassland Animals	157
Activity 2: Investigating Ways Grassland Animals Adapt	159
How Animals Adapt to Hot Desert Environments	161
Activity 1: Studying Examples of Desert Animals	164
Activity 2: Investigating Ways Desert Animals Adapt	166
Animal Defense	168
Background Information	168
Activity 1: Acting Out How Animals Defend Themselves	172



Relationship of Humans with Animals	174
Background Information	174
Uses for Animals	174
Activity 1: Identifying Animals That Humans Eat	179
Activity 2: Investigating Other Uses for Animals	181
Animal Care	183
Activity 1: Exploring the Tasks Involved in Caring for Captive Animals	187
Animal Stories	190
Activity 1: Writing Descriptive Animal Stories	193
RESOURCES	195
GLOSSARY	204