

Teacher Training Manual: Astronomy (3-6)



Introduction

This manual offers a structured approach for introducing young learners to the study of space. Here, you'll find lesson plans for nomenclature cards, puzzles, charts, and hands-on activities. These materials build on each other and invite children to immerse themselves in the study of space and the stars, fostering curiosity and discovery.

The study of astronomy at an early age is essential as it expands children's understanding of the Universe, helping them realize that there are other objects beyond our Earth. As children explore lessons such as matching objects to pictures of the Solar System, orbiting around the sun, and examining the phases of the moon, they will strengthen observation skills, vocabulary development, sequencing, and spatial awareness. Through these lessons, children will develop an awareness of their place in the vast expanse of space and an appreciation for humanity's endeavors in exploring it.

This manual aims to help educators enhance their knowledge of the elements of our Universe, so that they may in turn nurture their students' connection to their own world and beyond. By guiding educators in the essential study of astronomy, we aim to ignite a sense of wonder, excitement, and a lifelong quest for knowledge, starting with our youngest learners.

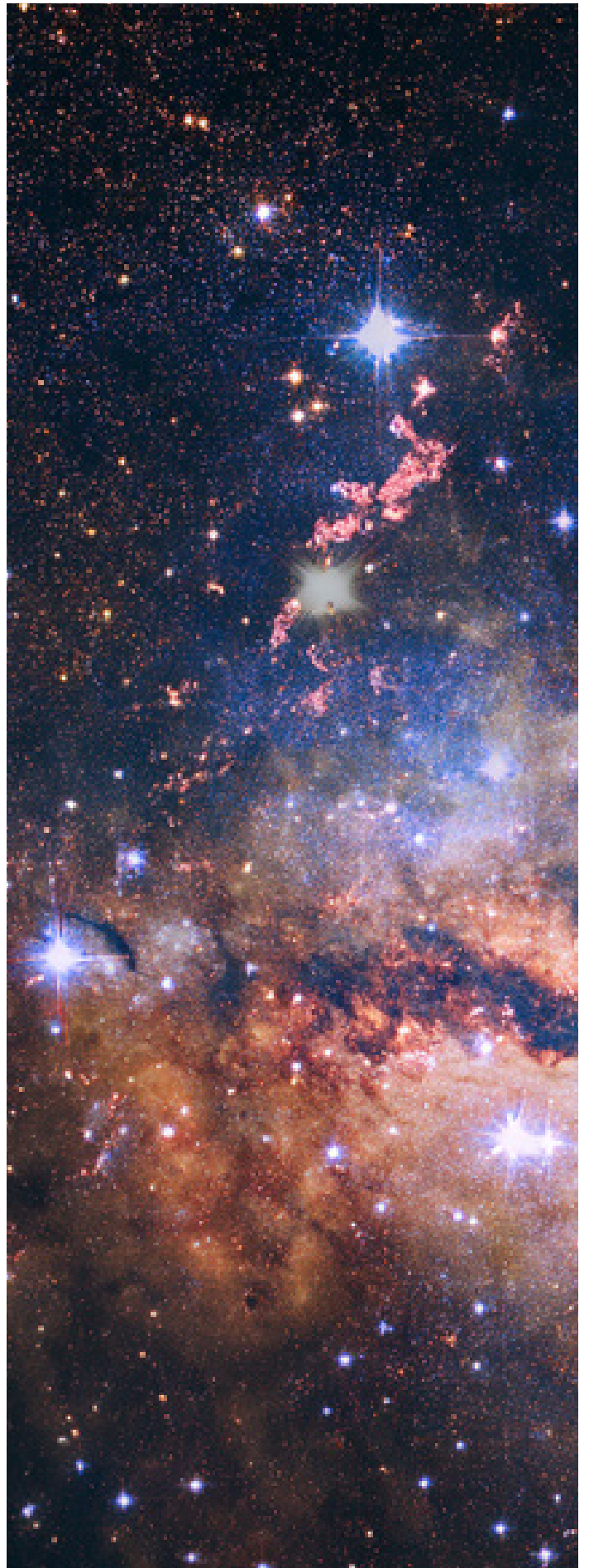


Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	7

Astronomy

Introduction	11
Scope and Sequence	14

Universe

Introduction	19
Activity - Starting With You!	20
Reference - The Three-Period Lesson	24
Activity - Universe - 3-Part Cards	26
Activity - Solar System - Control Booklet	30
Activity - My Universe Jar	34

Solar System

Introduction	39
Activity - Object to Picture Matching	40
Activity - Picture to Picture Matching	43
Activity - Mini Space Landscape	46
Activity - Space Drawing	49
Activity - Solar System Puzzle	52
Activity - Solar System Chart	56
Activity - Solar System - 3-Part Cards	60
Introduction - The Sun	61
Activity - The Sun - 3-Part Cards	62
Introduction - Planets	63
Activity - Orbiting Around the Sun	64
Activity - Creating a Planet	68
Introduction - Mercury	71

Activity - Mercury - 3-Part Cards	72
Introduction - Venus	73
Activity - Venus - 3-Part Cards	74
Introduction - Earth	75
Activity - Earth - 3-Part Cards	76
Introduction - Mars	77
Activity - Mars - 3-Part Cards	78
Introduction - Jupiter	79
Activity - Jupiter - 3-Part Cards	80
Introduction - Saturn	81
Activity - Saturn - 3-Part Cards	82
Introduction - Uranus	83
Activity - Uranus - 3-Part Cards	84
Introduction - Neptune	85
Activity - Neptune - 3-Part Cards	86
Activity - The Solar System Blackline Booklet	87
Layers of the Earth	88
Activity - Layers of the Earth Puzzle	88
Activity - Layers of the Earth - 3-Part Cards	91
Activity - Layers of the Earth Blackline Booklet	93
Layers of the Sun	94
Activity - Layers of the Sun Puzzle	94
Activity - Layers of the Sun - 3-Part Cards	98
Activity - Layers of the Sun Blackline Booklet	101
Introduction - Earth's Moon	102
Activity - The Moon - 3-Part Cards	103
Activity - Making Craters on the Moon	104
Activity - Hanging the Moon in the Sky	108
Activity - Phases of the Moon Puzzle	112
Activity - Phases of the Moon - 3-Part Cards	115
Activity - Sand Painting the Moon	117
Introduction - Stars	121
Activity - Day and Night Skies - 3-Part Cards	122
Activity - Day and Night	123
Activity - Informed and Mute Charts	127

Activity - Day vs. Night Sorting	128
Activity - Inset Stars	131
Activity - Star Sewing Card	134

Space Travel

Introduction	137
Activity - Space Travel - 3-Part Cards	138
Activity - Parts of an Astronaut Suit Puzzle	139
Activity - Parts of an Astronaut Suit - 3-Part Cards	143
Activity - Parts of an Astronaut Suit Blackline Booklet	145
Activity - Parts of a Space Shuttle Puzzle	146
Activity - Parts of a Space Shuttle - 3-Part Cards	149
Activity - Parts of a Space Shuttle Blackline Booklet	151
Activity - Recycled Rockets	152
Activity - Mini Moon Landscape	155
Activity - Picnic in Space	158

Teacher Training Manual: Botany (3-6)



Introduction

This manual offers a structured approach to introducing young learners to the study of botany. You'll find carefully crafted lesson plans for nomenclature cards, engaging puzzles and charts, and hands-on activities. These materials build on each other and invite children to immerse themselves in the study of nature, the Earth, and plants.

The study of plants at an early age is essential, as it expands children's understanding of the natural world, helping them realize the critical role plants play in sustaining life on Earth. Through these lessons, children will develop an awareness of their connection to the environment and an appreciation for the diversity and beauty of plant life. This manual aims to help educators enhance their knowledge of botany, so they may, in turn, nurture their students' understanding and love for all living things.

By guiding educators in the essential study of botany, we aim to encourage curiosity, excitement, and a lifelong quest for knowledge, starting with our youngest learners. Together, let's inspire young minds to appreciate the plants that make our world thrive and guide them to become responsible caretakers of the Earth. After all, Earth is our home!



Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	10

Botany

Introduction	19
Scope and Sequence	23

Botany Presentations

Introduction	32
Activity - Botany Control Tray	33
Activity - Botany Tray (Concrete)	37
Activity - Botany Basket (Abstract)	41
Activity - Scientific Names	44
Activity - Parts of a Tree Puzzle	47
Reference - The Three-Period Lesson	50
Activity - Parts of a Tree - 3-Part Cards	52
Activity - Parts of a Tree - Blackline Booklet	57
Activity - Parts of a Tree - Control Booklet	58
Activity - Plant Families	62
Activity - Sorting (Living, Non-Living, and Once Living)	66
Activity - Sorting (Plant, Animal, Rock)	72
Activity - Nature Walks	77
Activity - Field Trips	80

Needs of Plants

Introduction	81
Activity - Needs of Plants Tray	82
Activity - Capillary Action (Flowers)	85
Activity - Light - Growing in the Dark	89
Activity - Air - Growing Without Breathing	92

Indoor Plants

Introduction	95
Activity - Indoor Plant Tray	96
Activity - How to Touch a Plant	100
Activity - How to Care for an Indoor Plant	104
Activity - Washing Leaves	109
Activity - Labeling Indoor Plants	113
Activity - Plant Care Booklet	117
Activity - Grow Herbs in a Terrarium	122
Activity - Flower Arranging	126

Outdoor Plants

Introduction	130
Activity - Needs of Outdoor Plants	131
Activity - How to Touch an Outdoor Plant	134
Activity - How to Care for an Outdoor Plant	135
Activity - Labeling Outdoor Plants	137
Activity - Composting	141
Activity - Life Cycle of Compost Puzzle	145
Activity - Life Cycle of Compost - 3-Part Cards	148
Activity - Soil Mixing	149
Activity - Plant a Garden	153
Activity - Weeding	159

Parts of a Seed

Introduction	162
Activity - Parts of a Seed Puzzle	163
Activity - Parts of a Seed - 3-Part Cards	167
Activity - Parts of a Seed - Blackline Booklet	169
Activity - Sorting Seeds	170
Activity - Crushing Seeds	173
Activity - Pinecone Bird Feeder	176

Parts of a Plant

Activity - Parts of a Plant Puzzle	181
Activity - Parts of a Plant - 3-Part Cards	185
Activity - Parts of a Plant - Blackline Booklet	187
Activity - Types of Buds Puzzle	188
Activity - Types of Buds - 3-Part Cards	191
Activity - Types of Buds - Blackline Booklet	193
Activity - Types of Stems Puzzle	194
Activity - Types of Stems - 3-Part Cards	197
Activity - Types of Stems - Blackline Booklet	199

Parts of a Root

Activity - Parts of a Root Puzzle	200
Activity - Parts of a Root - 3-Part Cards	203
Activity - Parts of a Root - Blackline Booklet	205
Activity - Stone Soup	206

Parts of a Leaf

Activity - Parts of a Leaf Puzzle	211
Activity - Parts of a Leaf - 3-Part Cards	215
Activity - Parts of a Leaf - Blackline Booklet	217
Activity - Matching Real Leaves	218
Activity - Pressing Leaves	222

Parts of a Flower

Activity - Parts of a Flower Puzzle	226
Activity - Parts of a Flower - 3-Part Cards	229
Activity - Parts of a Flower - Blackline Booklet	231
Activity - Flower Pounding	232
Activity - Flower Dissection	236
Activity - Life Cycle of a Tulip Puzzle	241
Activity - Life Cycle of a Tulip - 3-Part Cards	244
Activity - Life Cycle of a Sunflower Puzzle	245
Activity - Life Cycle of a Sunflower - 3-Part Cards	248

Parts of a Fruit

Activity - Parts of a Fruit Puzzle	249
Activity - Parts of a Fruit - 3-Part Cards	253
Activity - Parts of a Fruit - Blackline Booklet	255
Activity - Parts of a Pumpkin Puzzle	256
Activity - Parts of a Pumpkin - 3-Part Cards	260
Activity - Parts of a Pumpkin - Blackline Booklet	262
Activity - Life Cycle of a Pumpkin Puzzle	263
Activity - Life Cycle of a Pumpkin - 3-Part Cards	266
Activity - Matching Fruits to Products	267

Parts of a Tree

Overview	271
Activity - Parts of a Branch Puzzle	272
Activity - Parts of a Branch - 3-Part Cards	276
Activity - Parts of a Branch - Blackline Booklet	278
Activity - Parts of an Acorn Puzzle	279
Activity - Parts of an Acorn - 3-Part Cards	282
Activity - Parts of an Acorn - Blackline Booklet	284
Activity - Parts of a Tree Trunk Puzzle	285
Activity - Parts of a Tree Trunk - 3-Part Cards	289
Activity - Parts of a Tree Trunk - Blackline Booklet	291
Activity - Types of Pine Trees Puzzle	292
Activity - Types of Pine Trees - 3-Part Cards	296
Activity - Types of Evergreen Trees Puzzle	298
Activity - Types of Evergreen Trees - 3-Part Cards	299
Activity - Life Cycle of an Oak Tree Puzzle	302
Activity - Life Cycle of an Oak Tree - 3-Part Cards	305
Activity - Types of Wood Puzzle	306
Activity - Types of Wood - 3-Part Cards	307

Botany Leaf Cabinet

Introduction	310
Activity - Botany Leaf Cabinet	311

Activity - Botany Leaf Shapes Puzzle	315
Activity - Types of Leaves Puzzle	318
Activity - Botany Leaf Cabinet with Large Puzzles	322
Activity - Trays/Insets/Frames	326
Activity - Inset to Card Matching	330
Activity - Botany Leaf Cabinet - 3-Part Cards	334
Activity - Botany Leaf Cabinet - Blackline Booklet	336
Activity - North American Botany Leaf Cabinet	337
Activity - North American Botany Leaf Shapes Puzzle	338
Activity - Trays/Insets/Frames	340
Activity - Inset to Card Matching	341
Activity - North American Botany Leaf Cabinet - 3-Part Cards	342
Activity - North American Botany Leaf Cabinet - Blackline Booklet	344

Grasses

Introduction	345
Activity - Grasses Object Tray	346
Activity - Grasses Picture Basket	349
Activity - Matching Grasses and Products	352
Activity - Baking Bread	356

Spices of the World

Introduction	359
Activity - Spices of the World Object Tray	360
Activity - Spices of the World Picture Basket	364
Activity - Baking a Spice Cake	367

Parts of Plants as Food for Our Table

Introduction	371
Activity - Parts of Plants as Food for Our Table Object Tray	372
Activity - Parts of Plants as Food for Our Table Picture Basket	375
Activity - Making Jam	378

Plants for Health

Introduction	384
Activity - Plants for Health Object Tray	385
Activity - Plants for Health Picture Basket	388
Activity - Cheerful Environment	391
Activity - Nutrition	394

Plant Life Habitats

Introduction	398
Activity - Plant Life Habitats Object Tray	400
Activity - Plant Life Habitats Picture Basket	403
Activity - Plant Habitat Classification Cards	406
Activity - Miniature Habitat Environment	410

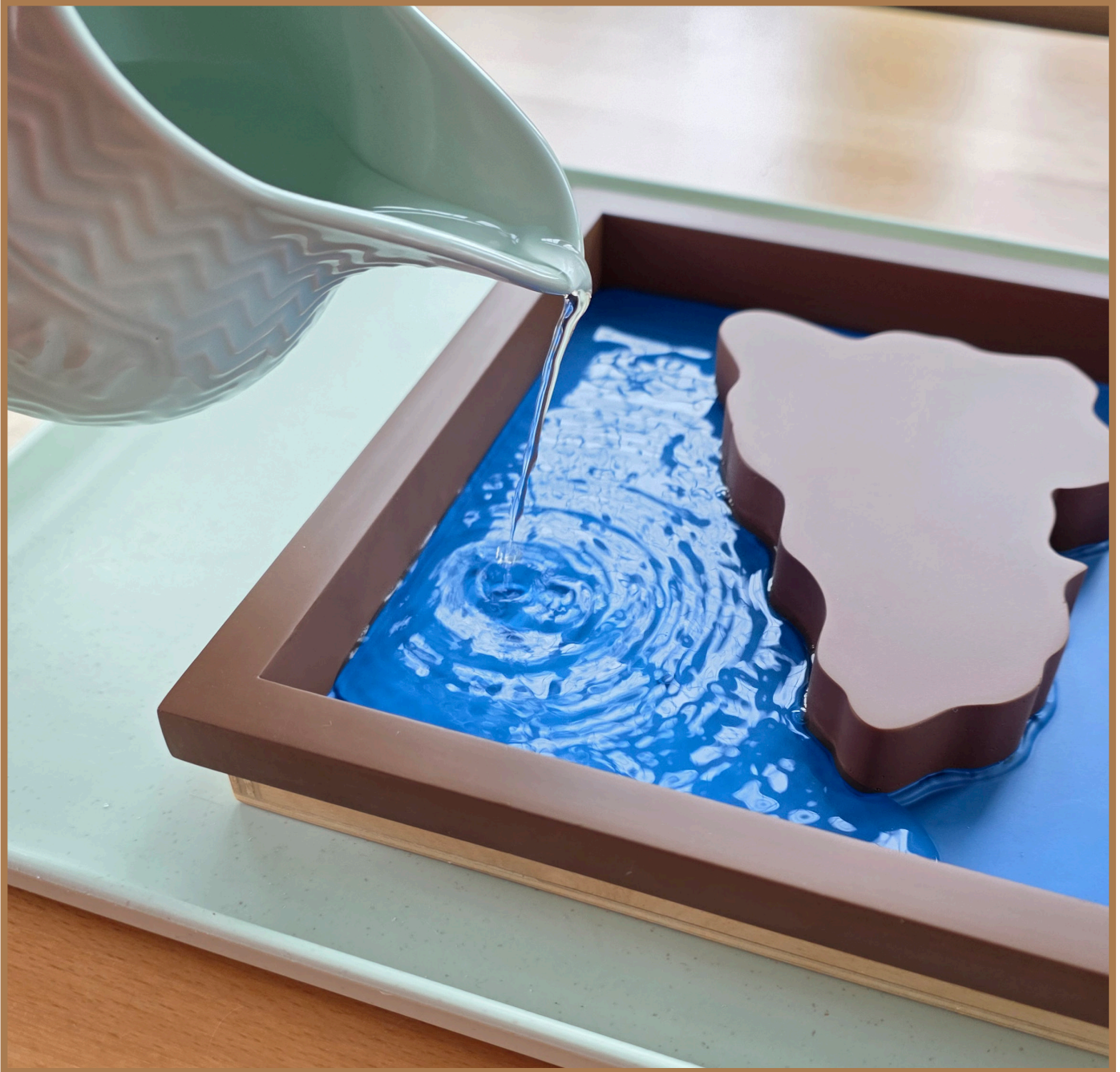
Plant Ecology

Introduction	414
Activity - Plant Ecology Object Tray	415
Activity - Plant Ecology Picture Basket	418
Activity - Drying Leaves and Herbs	421
Activity - Making Mint Tea	426
Activity - Making Potpourri	431
Activity - Papermaking	436

Classroom Environment

Practical Life	440
Sensorial	443
Language	444
Art	445
Mathematics	446

Teacher Training Manual: Geography (3-6)



Introduction

The lessons in this manual introduce children to the study of geography: an exploration of the Earth, its features, and the relationships between people and their environment. Here, educators will find detailed lesson plans that guide children through foundational concepts such as land and water, continents, maps, directionality, and the natural systems of the Earth.

As children work with materials such as globes, puzzle maps, and classification activities, they develop spatial awareness, observation skills, and geographic vocabulary. They learn to distinguish between land and water, recognize continents and countries, understand how maps represent real places, and explore how people, animals, and environments are connected across the world.

These lessons support children's growing awareness of their place on Earth and their connection to others. From exploring their immediate environment to understanding global relationships, children develop curiosity, respect, and a sense of responsibility for the world. These experiences prepare them for further academic study, as well as for participation in our diverse and interconnected world.



Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	9

Geography

Introduction	35
Scope and Sequence	39

The Study of the Earth

Introduction	49
Activity - Study of the Earth Geography Tray	50
Activity - Study of the Earth Geography Basket	54
The Shape of the Earth	57
Reference - Three-Period Lesson	58
Activity - Sandpaper Globe of Land and Water	60
Activity - Sandpaper Land and Water Form Cards	66
Activity - Continent Globe	71
Montessori Puzzle Maps	75
Activity - Puzzle Map of the World	77
Activity - Posters of the World	85
Activity - Continents Memory Game	90
Activity - Continents - 3-Part Cards	93
Activity - Continents - Blackline Booklet	98
Introduction - Land, Air, and Water	99
Activity - Land, Air, and Water Object Tray	100
Activity - Land, Air, and Water Picture Basket	104
Activity - Land, Air, and Water Transportation	108
Activity - Transportation Around the World	113
Activity - Land, Air, and Water Animals	116
Introduction - Land and Water Forms	120
Activity - Land and Water Form Trays	122
Activity - Land and Water Form Cabinet	126

Activity - Land and Water Forms - 3-Part Cards	130
Activity - Land and Water Forms - Blackline Booklet	132

Mapping and Directionality

Introduction	133
Activity - Primitive Map Drawing	134
Activity - Mapping a Shelf	137
Activity - Mapping a Classroom	141
Activity - Mapping a Street	145
Understanding Our Place on Earth	149
Activity - Me on the Map	150
Introduction - Directionality	156
Activity - Where is North?	157
Activity - Making a Compass	162
Activity - Finding North, South, East, and West	167
Activity - Compass Rose Puzzle	173
Activity - Directions on a Compass Puzzle	177
Activity - Directions on a Compass - 3-Part Cards	181
Activity - Making a Treasure Map	183

Maps, Continents, and Countries

Introduction	188
Activity - Puzzle Map of North America	189
Activity - Puzzle Map of North America Extensions	197
Activity - Flag Stand of North America	205
Activity - Four Maps of North America (Push Pin Map)	210
Activity - Flags of North America - 3-Part Cards	215
Activity - Flags and Maps of North America - 3-Part Cards	217
Activity - Continent Study of North America Box	219
Activity - Puzzle Map of South America	225
Activity - Continent Work - South America	227
Activity - Puzzle Map of Europe	228
Activity - Continent Work - Europe	230
Activity - Puzzle Map of Asia	231
Activity - Continent Work - Asia	233

Activity - Puzzle Map of Africa	234
Activity - Continent Work - Africa	236
Activity - Puzzle Map of Australia	237
Activity - Continent Work - Australia	239
Activity - Puzzle Map of Antarctica	240
Activity - Continents and Their Animals Sorting Tiles	245
Activity - Animals of the Continents Classification Cards	249
Activity - Continents and Their Landmarks Sorting Tiles	253
Activity - Puzzle Map of the USA	255
Activity - Study of the United States Object Tray	257
Activity - Study of the United States Picture Basket	260
Activity - Parts of a Flag Puzzle	263
Activity - Parts of a Flag - 3-Part Cards	267

Biomes and Ecosystems

Introduction	269
Ecosystems	270
Rationale: Informed and Mute Charts	271
Activity - Life in a Backyard Chart	272
Activity - Biomes of North America Puzzle Map	277
Activity - Biomes of Asia Puzzle Map	282
Activity - Biomes of Europe Puzzle Map	284
Activity - Biomes of South America Puzzle Map	286
Activity - Biomes of Australia Puzzle Map	288
Activity - Biomes of Africa Puzzle Map	290
Activity - Temperate Deciduous Forest Biome Chart	292
Activity - Temperate Deciduous Forest Biome - 3-Part Cards	296

Geology

Introduction	298
Activity - Rock Hunting	299
Activity - Group Rock Sculpture	303
Activity - Storytelling - Our Classroom Rock	307
Activity - Hardness of Rocks	310
Activity - Grinding Rock Salt	315

Activity - Precious Stones Puzzle	319
Activity - Precious Stones - 3-Part Cards	322
Activity - Parts of a Mountain Puzzle	324
Activity - Parts of a Mountain - 3-Part Cards	328
Activity - Parts of Fold Mountains Puzzle	330
Activity - Parts of Fold Mountains - 3-Part Cards	333
Activity - Parts of a River Puzzle	335
Activity - Parts of a River - 3-Part Cards	339
Activity - Layers of Soil Jar	341
Activity - Layers of Soil Puzzle	345
Activity - Layers of Soil - 3-Part Cards	349
Activity - The Rock Cycle Puzzle	351
Activity - The Rock Cycle - 3-Part Cards	355
Activity - Parts of a Volcano Puzzle	357
Activity - Parts of a Volcano - 3-Part Cards	361
Activity - Volcano Eruption	363
Activity - Exploring Igneous Rocks	367
Activity - Miniature Fossil Dig	371
Activity - Layers of the Earth Clay Model	375
Activity - Layers of the Earth Puzzle	380
Activity - Layers of the Earth - 3-Part Cards	384
Activity - Layers of the Earth - Blackline Booklet	386
Geology Around the Classroom	387

Ecology

Introduction	395
Natural Systems of the Earth	396
Activity - Types of Clouds Puzzle	397
Activity - Types of Clouds - 3-Part Cards	401
Activity - Blowing in the Wind	403
Activity - Wearing Away to Nothing	407
Activity - The Water Cycle Puzzle	411
Activity - The Water Cycle - 3-Part Cards	415
Activity - Weather Instruments Matching Tiles	417
Activity - Weather Instruments - 3-Part Cards	421

Activity - Basic Weather Symbols - 3-Part Cards	423
Activity - Types of Natural Disasters Puzzle	426
Caring for the Environment	429
Activity - Picking Up Litter	430
Activity - Miniature Litter Environment	433
Activity - Preventing Danger	436
Activity - Air Contaminant Collection	439
Activity - Types of Pollution Puzzle	442
Activity - Types of Pollution - 3-Part Cards	446
Activity - Sky, Ground, Water - 3-Part Cards	448
Activity - Pollution Classification Charts	450
Activity - What is Biodegradable?	454
Activity - Garbage Can Garden	458
Activity - Making Choices	461
Activity - Preserving our Environment Chart	465
Activity - Community Helpers Puzzle	469
Activity - Community Helpers - 3-Part Cards	473
Activity - Pinecone Bird Feeder	475
Activity - Everything is Connected	480
Activity - Pond Food Chain Puzzle	485

Teacher Training Manual: Language Manual I (3-6)



Introduction

This manual offers a structured approach to preparing young learners for reading and writing. Inside, you'll find carefully designed lesson plans that guide educators through oral language development, key practical life and sensorial experiences, and foundational pre-reading and pre-writing activities. Each component builds upon the last, creating a meaningful path that supports children's natural progression into literacy.

Laying the groundwork for language at an early age is essential. Through intentional conversation, movement, and exploration, children develop the skills needed to express themselves clearly, recognize symbols and sounds, and eventually read and write. This manual supports educators in deepening their understanding of how language unfolds in the early years so they can nurture each child's learning journey.

By guiding educators in this essential first stage of language development, we aim to instill confidence and purposeful communication in our youngest learners. Together, let's cultivate a love for language that begins with listening and speaking, and blossoms into reading and writing, which are skills that help children connect with others and share their ideas with the world.



Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	7

Language - Manual 1

Introduction	15
Scope and Sequence	18

Oral Expression

Introduction	24
Activity - Storytelling - <i>Our Classroom Rock</i>	26
Activity - Drama	30
Activity - Poetry - <i>Little Bird</i>	31
Activity - Finger Plays - <i>Itsy Bitsy Spider</i>	34
Activity - Sharing Time - Show and Tell	37
Activity - Songs - <i>Twinkle, Twinkle Little Star</i>	40
Activity - Teacher's Vocabulary and Conversation	43

Practical Life

Introduction	44
Activity - Bead Stringing	45
Activity - Cubes and Cards	48
Activity - Sticker Pattern Card	52
Activity - Turning Book Pages	56
Activity - Following Directions - The Silence Game	59

Sensorial

Introduction	63
Activity - Sorting Objects	64
Activity - Rough and Smooth Tactile Boards	68

Activity - Matching Fabric Box	72
Activity - Visual Discrimination Cards	77
Activity - Bingo Games	81
Activity - Color Matching Memory Game	84
Activity - Sequencing	88
Activity - Sequencing Picture Cards	92
Activity - Puzzles	95
Activity - Categorizing - Alike and Not Alike	98
Activity - Riddles	102
Activity - What's Missing	105
Activity - What's Missing (Attributes)	108

Pre-Reading

Introduction	111
Reference - The Three-Period Lesson	113
Activity - Types of Fruits - 3-Part Cards	115
Activity - Pets - Object to Picture Matching	120
Activity - Animals and Their Young Matching Objects	123
Activity - Fruit Matching Cards	126
Activity - Fruits Inside/Outside Matching Puzzle	130
Activity - Fruit Matching Cards - Inside/Outside	133
Activity - Color Matching Tiles	137
Activity - Animals and Their Young Matching Tiles	141
Activity - Things at School Picture Basket	145
Activity - Opposites Picture Cards Tray	149
Activity - Pets - Object to Silhouette Matching	153
Activity - Picture to Silhouette Matching Cards	157
Activity - Silhouette to Picture Matching Clip Cards	161
Activity - Picture to Silhouette Matching Clip Cards	164
Activity - Figure-Ground Matching Cards	165
Activity - Rhyming Picture Cards Basket	168
Activity - Classified Objects - Mammal or Bird?	171
Activity - Language Classification Cards	174
Activity - Classified Pictures - Mammal or Bird?	178
Activity - Part to Whole Matching Cards	182

Activity - Things That Go Together	186
Activity - Get on the Rug Game	190
Activity - Bird and Birdhouse	193
Activity - Early Letter Matching and Recognition Mat	197
Activity - Letter Matching Mats	200

Pre-Writing

Introduction	203
Activity - Metal Insets - Tracing Outlines	205
Activity - Crayons	209
Activity - Markers	213
Activity - Crayons - Parallel Lines	216
Activity - Painting	220
Activity - Pasting	224
Activity - Punching - Geometric Cabinet	228
Activity - Pegs and Peg Board	232
Activity - Sewing Cards	234
Activity - Name Tracing Card	237
Activity - Pincer Activity - Spooning	240
Activity - Pincer Activity - Eyedropper	242
Activity - Pincer Activity - Tweezers	245
Activity - Pincer Activity - Tongs	248
Activity - Pincer Activity - Clothespins	251
Activity - Pincer Activity - Clothes Line	254

Teacher Training Manual: Language Manual 2 (3-6)



Introduction

The lessons in this manual guide children beyond the early foundations of pre-reading and pre-writing into emerging reading and more formal writing. Here, educators will find detailed lesson plans that introduce the Sandpaper Letters, Movable Alphabet, the Language Series, and more formal handwriting work. These lessons will support children's growing ability to decode, comprehend, and express language with greater fluency.

As children begin to read simple words, phrases, and eventually sentences, they start to recognize different patterns, phonograms, and spelling variations of written words. Through carefully sequenced materials, they explore the sounds and structures of language more deeply, learning to build, read, and write.

By nurturing the development of emerging readers and writers, educators can help children along in their literacy journey. The lessons in this manual bring children closer to mastering reading and written expression, preparing them for grammar, composition and the advanced handwriting to follow. From decoding to fluent reading, and from early marks on paper to confident writing, children move steadily along the path of language development.



Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	8

Language - Manual 2

Introduction	22
Scope and Sequence	26
Cursive in Montessori	34

Letter Sounds

Introduction	37
Reference - Three-Period Lesson	38
Reference - Letter-Sound Correspondence	40
Activity - Sandpaper Letters	41
Activity - Sound Association Cards	46
Activity - Sandpaper Letters and Object Matching	50
Activity - I Spy Objects Initial Sounds Tray	54
Activity - Initial Sounds Mat	57
Activity - Initial Sound Matching Tiles	61
Activity - Initial Sound Matching Mats	65
Activity - Initial Sound Booklets	69
Activity - Medial Sound Matching Mat	72
Activity - Ending Sound Matching Mats	76
Introduction - Movable Alphabet	80
Activity - Introduction to the Movable Alphabet	82
Activity - Movable Alphabet and Sandpaper Letters	85
Activity - Movable Alphabet - Can You Find?	89
Activity - Movable Alphabet - Go Get and I Spy	92

Pink Language Series

Introduction	96
--------------------	----

Activity - Movable Alphabet - Word Building	97
Activity - Movable Alphabet and Objects	100
Activity - Movable Alphabet and Pink Picture Cards	104
Activity - Pink Series - Word and Picture Cards	108
Activity - Pink Series - Words and Objects	112
Activity - Pink Secrets	116
Activity - Pink Series - Word Booklets	119
Activity - Pink Series - Word Lists	123
Activity - Pink Series - Rhyming Families	126
Activity - Pink Series - Vowel Substitution	130
Activity - Pink Series - Command Cards	133
Activity - 'a' and 'the'	136
Activity - Pink Series - Pictures and Phrases	140
Activity - Period, Question Mark, Comma, and Exclamation Point	143
Activity - Punctuation Marks Cloth Chart	146
Activity - Punctuation Marks - 3-Part Cards	149
Activity - Pink Series - Pictures and Sentences	154
Activity - Pink Series - Command Sentences	157
Activity - Sight Word Cards	160
Rationale - Introducing Uppercase Letters	163

Blue Language Series

Introduction	164
Rationale - Red and Black Movable Alphabet	166
Activity - Movable Alphabet and Initial Blends	167
Activity - Movable Alphabet - Word Building	171
Activity - Movable Alphabet and Objects	174
Activity - Movable Alphabet and Blue Picture Cards	178
Activity - Blue Series - Initial Blends and Picture Cards	182
Activity - Movable Alphabet and Ending Blends	186
Activity - Blue Series - Ending Blends and Picture Cards	188
Activity - Movable Alphabet and Consonant Digraphs	190
Activity - Blue Series - Consonant Digraphs and Picture Cards	192
Activity - Blue Series - Word and Picture Cards	194
Activity - Blue Series - Words and Objects	198
Activity - Blue Secrets	202

Activity - Blue Series - Word Booklets	204
Activity - Blue Series - Word Lists	207
Activity - Blue Series - Rhyming Families	211
Activity - Blue Series - Vowel Substitution	215
Activity - Blue Series - Command Cards	218
Activity - Blue Series - Pictures and Sentences	221
Activity - Blue Series - Command Sentences	225

Green Language Series

Introduction	228
Activity - Double Sandpaper Letters	230
Rationale - Green and Yellow Movable Alphabet	236
Activity - Movable Alphabet and Phonograms	237
Activity - Movable Alphabet - Word Building	241
Activity - Movable Alphabet and Objects	244
Activity - Movable Alphabet and Green Picture Cards	248
Reference - Common Phonograms - Words	251
Activity - Green Series - Word and Picture Cards	253
Activity - Green Series - Words and Objects	257
Activity - Green Secrets	261
Activity - Green Series - Word Booklets	263
Activity - Green Series - Word Lists	266
Activity - Green Series - One Letter, Different Sounds	269
Activity - Green Series - Double Vowels	274
Activity - Introduction to the Silent 'e'	278
Activity - Using the Transparent Silent 'e'	282
Activity - Green Series - Command Cards	286
Activity - Environment Labels	289
Activity - Green Series - Sentence Strips	292
Activity - Compound Words Picture Cards	295

Handwriting

Introduction	299
Activity - Wooden Tracing Stencils	300
Activity - Pre-Writing Linear Patterns Board	303

Activity - Pre-Writing Closed Shapes Board	305
Activity - Metal Insets	307
Activity - Metal Insets - 3-Part Cards	311
Activity - Sand Tracing Letters	313
Activity - Sand Tracing Numerals	317
Activity - Lowercase Print Tracing Boards	321
Activity - English Alphabet Tracing Board (Lowercase)	325
Rationale - Slanting the Paper	328
Activity - Design Shape Dots	330
Activity - Letter Pattern Tracing	334
Activity - Numeral Pattern Tracing	338
Activity - Dotted Letter Tracing	342
Activity - Dotted Numeral Tracing	346
Activity - 'In the Air'	350
Activity - Greenboard Lessons	353

Teacher Training Manual: Language Manual 3 (3-6)



Introduction

The lessons in this manual guide children into a deeper exploration of the structure and mechanics of language. Educators will find detailed lesson plans that introduce and teach the parts of speech, helping children solidify their understanding of how language functions. This manual also includes the introduction of uppercase letters and the continuation of handwriting, with lessons on line placement and writing letters and numbers on guidelines.

As children move beyond simple reading and writing into an awareness of grammar, they begin to see how words work together to form meaning. Through hands-on materials and sequenced lessons, they gain familiarity with the parts of speech, building a foundation for composition and clear written expression.

By supporting these aspects of language, educators can help children take significant steps forward in their literacy journey. The lessons in this manual will strengthen their skills as readers and writers while nurturing precision in handwriting and a clear understanding of language structure. This work prepares them for the next stages of composition, grammar analysis, and advanced fluency, ensuring that their early experiences with language lead towards mastery.



Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	7

Language - Manual 3

Introduction	12
Scope and Sequence	16

Parts of Speech

Introduction	22
Reference - The Three-Period Lesson	24
Activity - Parts of Speech - 3-Part Cards	26
Activity - Parts of Speech - Blackline Booklet	31
Introduction - Nouns	32
Activity - Noun Game 1	33
Activity - Noun Game 2	35
Activity - Noun Game 3	38
Activity - Introduction to the Noun Symbol	41
Activity - Noun Symbol and the Environment	45
Activity - Noun Environment Box	49
Activity - Noun Object Box	52
Activity - Singular and Plural	56
Introduction - The Farm	61
Activity - Nouns and the Farm	63
Introduction - Articles	67
Activity - Article Game 1 - 'a' and 'an'	68
Activity - Article Game 2 - 'a', 'an', and 'the'	72
Activity - Introduction to the Article Symbol	76
Activity - Definite and Indefinite	80
Activity - Articles and the Farm	84
Introduction - Adjectives	88
Activity - Adjective Game	89

Activity - Noun-Adjective Box	93
Activity - Introduction to the Adjective Symbol	96
Activity - Adjective Object Box	100
Activity - Detective Adjective Exercise	105
Activity - Adjectives and the Farm	110
Introduction - Verbs	114
Activity - Verb Game	115
Activity - Introduction to the Verb Symbol	118
Activity - Ball Action Game	122
Activity - Verb Box	127
Activity - Noun-Verb Box	131
Activity - Verbs and the Farm	135
Introduction - Adverbs	139
Activity - Adverb Game	140
Activity - Introduction to the Adverb Symbol	143
Activity - Verb-Adverb Box	146
Activity - Logical Adverb Game	150
Introduction - Prepositions	154
Activity - Preposition Game 1	155
Activity - Preposition Game 2	158
Activity - Introduction to the Preposition Symbol	162
Activity - Prepositions and the Farm	165
Introduction - Pronouns	169
Activity - Pronoun Game	170
Activity - Introduction to the Pronoun Symbol	173
Activity - Pronoun Box	176
Introduction - Conjunctions	181
Activity - Conjunction Game 1	182
Activity - Conjunction Game 2	186
Activity - Conjunction Flower Arranging	190
Activity - Introduction to the Conjunction Symbol	195
Activity - Conjunctions and the Farm	199
Introduction - Interjections	203
Activity - Interjection Game	204
Activity - Interjection to Sentence Matching	207

Activity - Introduction to the Interjection Symbol	211
--	-----

Uppercase Letters

Introduction	215
Activity - Sandpaper Letters (Uppercase)	217
Activity - Sand Tracing Uppercase Letters	222
Activity - Lowercase to Uppercase Matching Tiles	226
Activity - Alphabet Board	230
Activity - Letter Matching Mats (Uppercase)	233
Activity - Uppercase Print Tracing Boards	236
Activity - Uppercase Alphabet Tracing Board	240
Activity - Uppercase Letter Pattern Tracing	243
Activity - Dotted Uppercase Letter Tracing	247

Handwriting

Introduction	251
Rationale - Letter Placement and Wide-Lined Paper	252
Activity - Letter Placement Board	253
Activity - Alphabet Placement Mat	257
Activity - One Letter/Numeral Per Page	261
Activity - Five Letters/Numerals Per Page	264
Activity - 0-9 Numerals Per Page	266
Activity - 26 Letters Per Page	268
Activity - Writing - Pink Word Booklets	270
Activity - Writing - Pink Word Lists	274
Activity - One Letter Per Page (Uppercase)	278
Activity - Five Letters Per Page (Uppercase)	280
Activity - 26 Letters Per Page (Uppercase)	282
Activity - Writing - Pink Sentence Cards	284

Teacher Training Manual: Mathematics Manual I (3-6)



Introduction

The lessons in this manual introduce children to the foundations of mathematical thinking through hands-on, concrete experiences. Educators will find carefully sequenced lessons that guide children through early preparation for mathematics, enumeration, linear counting, and the beginnings of the decimal system. Each activity is designed to support children's developing capacity to reason, classify, and quantify their world.

Through work such as counting objects, matching numerals to quantities, exploring patterns, and working with bead material, children will construct a strong understanding of number relationships and numerical order. As children progress from simple counting experiences to more complex sequences and quantities, they will develop both accuracy and confidence in their mathematical abilities.

The lessons in this manual support the development of the mathematical mind by fostering logical thinking and independence with numbers. By moving from concrete experiences towards abstraction at the child's pace, children will build a solid foundation for future arithmetic work while cultivating a positive relationship with mathematics that will support their academic growth in the years ahead.

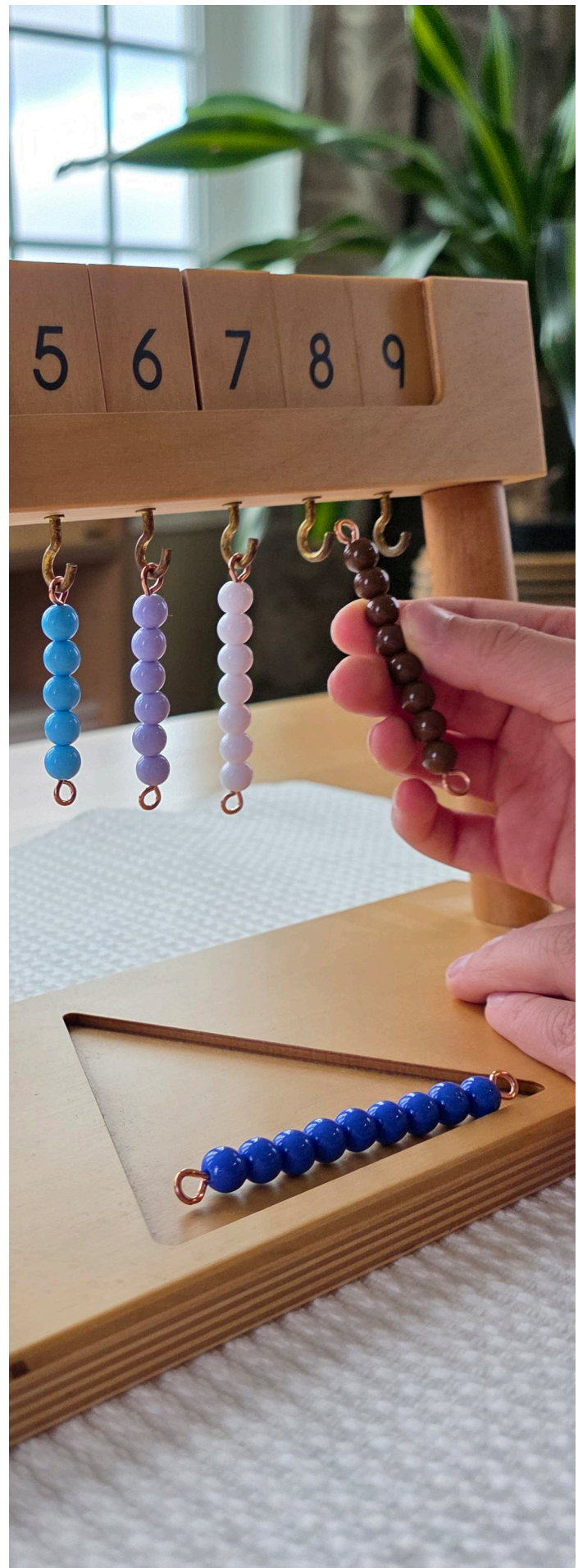


Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	7

Mathematics

Introduction	19
Scope and Sequence	23
The Mathematical Mind	31

Preparation for Mathematics

Introduction	34
Activity - Counting Books	35
Activity - Counting Songs - <i>Three Little Speckled Frogs</i>	38
Activity - Classifying Numerals and Fish	41
Activity - Sorting Objects	44
Activity - Egg Carton One-to-One Correspondence	47
Activity - Cubes and Cards	50
Activity - Patterns Board	54
Activity - Power of Two Cube	57
Activity - Binomial Cube	62
Activity - Trinomial Cube	70
The Role of Practical Life Work in Mathematics	79
Activity - Apple Coring	81

Enumeration 1-10

Introduction	86
Sensorial: The Foundation of Mathematical Thinking	87
Reference - Three-Period Lesson	89
Activity - Red and Blue Number Rods	91
Activity - Red Rods and Number Rods - Extension Charts	97
Activity - Sandpaper Numerals (0-9)	102

Activity - Sand Tracing Numerals	107
Activity - Wooden Numbers Puzzle	111
Activity - Number Tracing Boards	115
Activity - Wooden Raised Number Tiles	119
Activity - Numbers Tracing Board	121
Activity - Number Rods and Numeral Cards	124
Activity - Spindle Boxes	130
Activity - Numerals and Counters	135
Activity - Number Counting Boards	140
Activity - Wooden Numbers Counting Tiles	144
Activity - Do as I Do Quantity Cards	148
Activity - Numeral Pattern Tracing	151
Activity - Dotted Numeral Tracing	155
Activity - Numbers Board	159
Activity - One Numeral Per Page	162
Activity - Five Numerals Per Page	165
Activity - 0-9 Numerals Per Page	167

Linear Counting

Introduction	169
Montessori Bead Material	170
Activity - Short Bead Stairs	171
Activity - Snake Game - Search for Ten	179
Activity - Teen Beads	187
Activity - Teen Boards	192
Activity - Number Rods (11-19)	198
Activity - Table Top Number Rods	202
Activity - Tens Beads (10-90)	207
Activity - Tens Boards (10-90)	210
Activity - Tens Boards and Beads (11-99)	215
Activity - Hundred Bead Chain and Arrows	221
Activity - Thousand Bead Chain and Arrows	227
Activity - Hundred Board and Numeral Tiles	234
Activity - Squaring Chains and Arrows	241
Activity - Cubing Chains and Arrows	246

Decimal System

Introduction	254
Activity - Introduction to Decimal Quantity	255
Activity - Decimal System Exchange Game	262
Activity - Decimal System 45 Layout	268
Activity - Decimal System - Go Fetch	278
Activity - Decimal System - Formation of Numerals	285

Teacher Training Manual: Mathematics Manual 2 (3-6)



Introduction

The lessons in this manual expand children's mathematical understanding through a comprehensive exploration of the four operations. Educators will find carefully sequenced lessons that guide children from concrete manipulation of materials to increasingly abstract reasoning and formal algorithms. Building upon prior work, each lesson is designed to deepen children's understanding of quantity, place value, and numerical relationships within the base-ten system.

Through work with the math materials, children will combine, take away, group, and share quantities. They will explore static and dynamic operations, practice exchanging across place value categories, analyze fact families, and record equations. As children move from concrete materials to symbolic representation, they will strengthen logical sequencing and internalize mathematical processes.

The lessons in this manual support the development of the mathematical mind. By progressing from hands-on experiences toward abstraction, children will build a strong foundation in operational fluency and number relationships. In doing so, they cultivate perseverance, problem-solving skills, and the ability to think mathematically as they move into more advanced mathematical work.

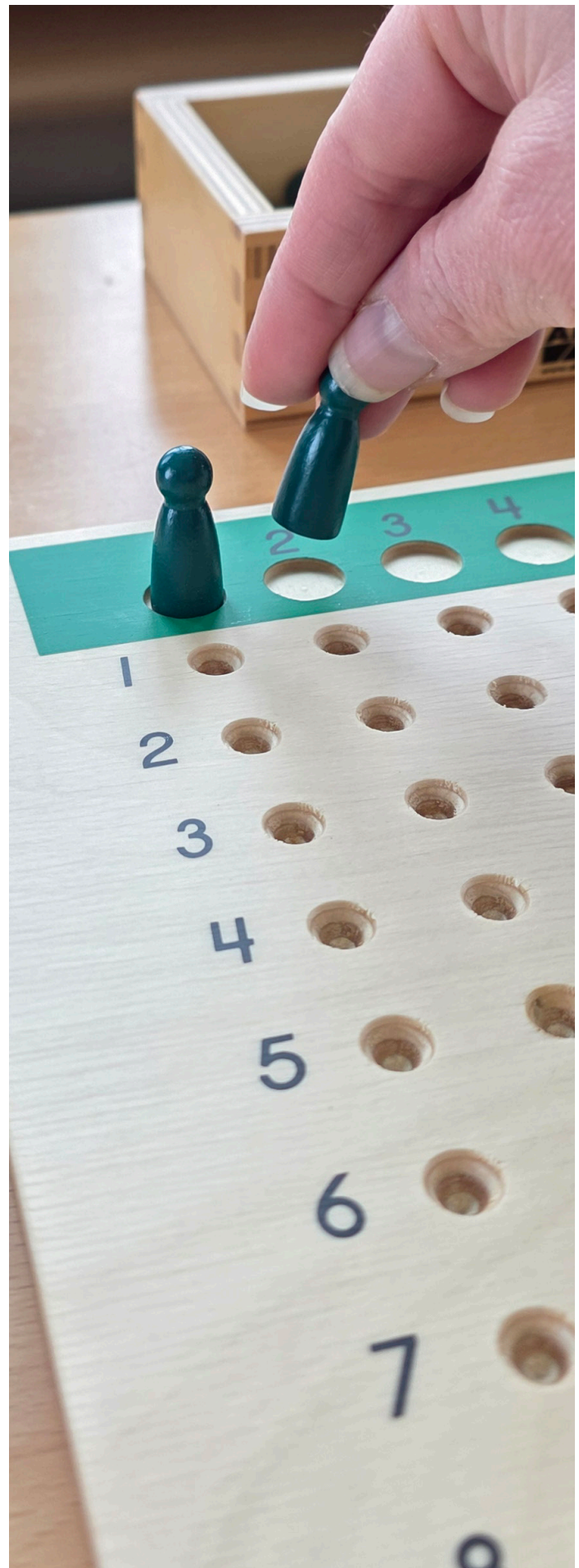


Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	7

Mathematics

Introduction	20
Scope and Sequence	24
The Four Operations	33
Reference: The Three-Period Lesson	36

Addition

Introduction	38
Activity - Golden Beads - Addition	39
Activity - Introduction to the Stamp Game	49
Activity - Stamp Game - Formation of Quantities	53
Activity - Stamp Game - Addition	58
Activity - Dot Exercise - Addition	65
Activity - Introduction to the Small Bead Frame	72
Activity - Small Bead Frame with Notation Paper	78
Activity - Small Bead Frame - Addition	85
Introduction - Addition Strip Board	91
Activity - Introduction to the Addition Strip Board	92
Reference - Addition Working Charts	96
Activity - Addition Tables Booklet	97
Activity - Addition Equations and Control Chart 1	102
Activity - Addition Control Charts 1 and 2	106
Activity - Addition Working Charts 3 and 4	115
Activity - Addition Working Chart 5	123
Activity - Blank Addition Chart	128
Activity - Addition Equations and Sums Game	131
Activity - Addition Snake Game	136
Activity - Decanomial Bead Box - Addition	141

Activity - Addition Formats	158
Activity - Addition Story Problems	162

Subtraction

Introduction	166
Activity - Golden Beads - Subtraction	167
Activity - Stamp Game - Subtraction	179
Activity - Dot Exercise - Subtraction	186
Activity - Small Bead Frame - Subtraction	193
Introduction - Subtraction Strip Board	199
Activity - Introduction to the Subtraction Strip Board	200
Reference - Subtraction Working Charts	205
Activity - Subtraction Tables Booklet	206
Activity - Subtraction Control Chart 1	211
Activity - Subtraction Working Chart 2	220
Activity - Subtraction Working Chart 3	224
Activity - Subtraction Strips	230
Activity - Subtraction Equations and Remainders Game	234
Activity - Subtraction Snake Game	238
Activity - Subtraction Formats	244
Activity - Subtraction Story Problems	247

Multiplication

Introduction	251
Activity - Golden Beads - Multiplication	252
Activity - Stamp Game - Multiplication	261
Activity - Dot Exercise - Multiplication	271
Activity - Small Bead Frame - Multiplication	277
Introduction - Multiplication Bead Board	284
Activity - Introduction to the Multiplication Board	285
Reference - Multiplication Working Charts	290
Activity - Multiplication Tables Booklet	291
Activity - Multiplication Equations and Control Chart 1	296
Activity - Multiplication Control Charts 1 and 2	300
Activity - Multiplication Working Charts 3 and 4	307

Activity - Blank Multiplication Chart	315
Activity - Multiplication Equations and Products Game	321
Activity - Multiplication Snake Game	325
Activity - Cubing and Squaring Chains	331
Activity - Decanomial Bead Box - Multiplication	341
Activity - Multiplication Formats	356
Activity - Multiplication Story Problems	359

Division

Introduction	363
Activity - Golden Beads - Division	364
Activity - Stamp Game - Division	378
Introduction - Division Bead Board	395
Activity - Introduction to the Division Board	396
Reference - Division Working Charts	401
Activity - Recording Division	402
Activity - Division Tables Booklet	409
Activity - Division Equations and Control Chart 1	413
Activity - Division Working Chart 2	418
Activity - Division Working Chart 3	422
Activity - Division Equations and Quotients Game	429
Activity - Division Formats	434
Activity - Division Story Problems	437
Activity - Relationship Between Multiplication and Division	441
Activity - Long Division Material	445
Activity - Long Division Stamp Game	470

Teacher Training Manual: Practical Life Manual (3-6)



Introduction

The lessons in this manual introduce children to the essential work of Practical Life: activities that develop independence, coordination, order, and confidence. In this manual educators will find detailed lesson plans that guide children through foundational skills such as pouring, spooning, sweeping, food preparation, caring for themselves, caring for the environment, and practicing grace and courtesy within the classroom community.

As children learn foundational lessons like carrying a chair, washing a table, preparing a snack, greeting others, or tending to plants, they strengthen fine and gross motor control, refine concentration, and understand the sequences that organize daily life. Through carefully sequenced activities, they learn to manage real tools, navigate social interactions, and take responsibility for their surroundings.

The lessons and activities in this manual support children's growing ability to coordinate their movements, develop concentration, and act independently. From simple exercises in movement and control to understanding how to care for the classroom and others, children develop respect and readiness for the academic, social, and practical aspects of daily life and experiences ahead.



Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	10

Practical Life

Introduction	22
Scope and Sequence	26
Introduction to the Learning Environment	40
The Prepared Environment	43

Foundational Classroom Skills

Introduction	46
Reference - The Three-Period Lesson	47
Activity - Standing	49
Activity - Walking	52
Rationale - The Importance of Work Mats	54
Activity - Carrying, Unrolling, and Rolling a Work Mat	55
Activity - Walking Around a Mat	58
Activity - Walking on the Line	61
Activity - Carrying a Tray	64
Activity - Carrying and Passing Sharp Objects	67
Rationale - Montessori Classroom Furniture	70
Activity - Carrying and Sitting on a Chair	71
Activity - Being Seated	75
Activity - Carrying and Sitting at a Table	77
Activity - Opening and Closing Drawers	81

Grace and Courtesy

Introduction	83
Activity - Greeting People - Hello and Goodbye	85
Activity - Introducing Yourself	88

Activity - Making Eye Contact	90
Activity - Inviting Someone and Asking to Join	92
Activity - Getting Someone's Attention	95
Activity - Following Directions - The Silence Game	98
Activity - Opening, Closing, and Knocking on Doors	102
Activity - Answering, Calling, and Getting Someone to the Phone	106
Activity - Coughing and Sneezing	110
Activity - Blowing Your Nose	113
Activity - Please, Thank You, and You're Welcome	116
Activity - Excusing Yourself	119
Activity - Table Manners	122

Care of Self

Introduction	130
Activity - Washing Hands	132
Activity - Brushing Teeth	136
Activity - Cleaning Fingernails	140
Activity - Combing or Brushing Hair	144
Activity - Braiding Board	148
Activity - Putting On, Taking Off, and Hanging a Coat	152
Activity - Cloth Folding Exercise	157
Activity - Washing and Drying Clothes	162
Activity - Rolling Socks	167
Activity - Sewing a Button	170
Activity - Ironing	176
Activity - Packing a Suitcase	180
Activity - Polishing Shoes	183
Activity - Taking Care of Personal Property	187
Introduction - Dressing Frames	190
Activity - Dressing Frames - Velcro	191
Activity - Dressing Frames - Snapping	195
Activity - Dressing Frames - Large Buttons	199
Activity - Dressing Frames - Small Buttons	202
Activity - Dressing Frames - Zipper	204
Activity - Dressing Frames - Hook and Eye	207
Activity - Dressing Frames - Buckling	210

Activity - Dressing Frames - Bow Tying	213
Activity - Dressing Frames - Lacing	217
Activity - Dressing Frames - Shoe Lace	221
Activity - Dressing Frames - Safety Pins	222
Activity - Dressing Frames - Bag Clipping	225

Using the Whole Hand

Introduction	228
Activity - Rolling Play Dough	229
Activity - Large Button Transferring	232
Activity - Transferring Water with a Sponge	235
Activity - Towel Wringing	239
Activity - Paper Punching	242
Activity - Shower Curtain Hooks	245
Activity - Transferring with Salad Tongs	248
Activity - Transferring with Meatball Tongs	251
Activity - Transferring with Chopsticks	254
Activity - Transferring with a Baster	257
Activity - Punching - Geometric Cabinet	260

Turning the Wrist

Introduction	264
Activity - Turning Book Pages	265
Activity - Flipping with a Spatula	268
Activity - Bottles and Caps	271
Activity - Opening and Closing Containers	274
Activity - Sharpening Pencils	277
Activity - Cutting Paper	280
Activity - Rolling Napkin with a Napkin Ring	284
Activity - Sewing Cards	288
Activity - Lacing Wooden Numbers	291
Activity - Lacing Wooden Alphabets	292
Activity - Paper Weaving	293
Activity - Pasting	297
Activity - Grating Soap	301

Activity - Grinding Eggshells	305
Activity - Crushing Seeds	309
Activity - Making Potpourri	312
Activity - Using a Hand Drill	317
Activity - Clay Hammering Exercise	321
Activity - Flower Pounding	324
Activity - Keys and Locks	328
Activity - Nuts and Bolts Set 1	331
Activity - Nuts and Bolts Set 2	335
Activity - Graded Bolt Board	337
Activity - Hex Bolt Board	341
Activity - Slotted Bolt Board	343
Introduction - Dry and Wet Pouring	345
Rationale - Using Real Dishware in the Classroom	346
Activity - Dry Pouring - Pitcher to Pitcher	347
Activity - Dry Pouring - Pitcher to Wide Neck	350
Activity - Dry Pouring - Pitcher to Narrow Neck with Funnel	353
Activity - Dry Pouring - Pitcher to Narrow Neck	357
Reference - Sequence of Dry Transferring Activities	359
Activity - Wet Pouring - Pitcher to Pitcher	360
Activity - Wet Pouring - Pitcher to Wide Neck	362
Activity - Wet Pouring - Pitcher to Narrow Neck with Funnel	364
Activity - Wet Pouring - Pitcher to Narrow Neck	366
Reference - Sequence of Wet Transferring Activities	368

The Three-Finger Grasp

Introduction	369
Activity - Cubes and Cards	370
Activity - Pegs and Peg Board	374
Activity - Small Button Transferring	376
Activity - Bead Stringing	379
Activity - Spooning	382
Activity - Eyedropper	384
Activity - Color Mixing	387
Activity - Tweezers	392

Activity - Dropping Beads into a Spice Bottle	395
Activity - Tongs	398
Activity - Clothespins	401
Activity - Clothes Line	404

Care of the Indoor Environment

Introduction	407
Activity - Sweeping	408
Activity - Using a Dustpan and Brush	411
Activity - Mopping	414
Activity - Using a Feather Duster	417
Activity - Washing and Scrubbing a Table	420
Activity - Washing a Doll	426
Activity - Scrubbing Toys	431
Activity - Washing Dishes	436
Activity - Sorting Cutlery	441
Activity - Setting the Table	444
Activity - Table Setting Puzzle	448
Activity - Breakfast Setting Puzzle	451
Activity - Wiping up a Spill	453
Activity - Polishing Silver	456
Activity - Polishing Wood	460
Activity - Polishing a Mirror	462
Activity - How to Care for an Indoor Plant	464
Activity - Washing Leaves	469
Activity - Flower Arranging	473

Care of the Outdoor Environment

Introduction	477
Activity - Germinating a Bean Plant	478
Activity - Plant a Garden	483
Activity - How to Care for an Outdoor Plant	488
Activity - Weeding	490
Activity - Picking up Litter	493

Food Preparation

Introduction	496
Activity - Slicing Vegetables/Fruits	497
Activity - Apple Coring	502
Activity - Skewering Fruit Kabobs	507
Activity - Whisking	511
Activity - Making Orange Juice	515
Activity - Making Mint Tea	519
Activity - Sifting Flour	524
Additional Food Preparation Activities	527

Teacher Training Manual: Sensorial Manual (3-6)



Introduction

The lessons in this manual guide children beyond simple sensory exploration into the refinement of perception and the development of the senses. Here, educators will find detailed lesson plans that introduce the Knobbed Cylinders, Pink Tower, Color Tablets, Sound Cylinders, Baric Tablets, and many more sensorial materials. These lessons will support children's growing ability to classify, compare, and interpret the qualities of the world around them.

As children explore size, shape, texture, sound, color, weight, temperature, and spatial relationships, they begin to recognize patterns, gradations, and distinctions that sharpen their awareness. Through carefully sequenced materials, they refine their visual, tactile, auditory, olfactory, gustatory, and stereognostic senses, building the foundation for abstract thought and intellectual development.

The lessons in this manual bring children closer to mastering perception, preparing them for mathematics, language, geography, and the sciences that follow. From the simple experiences of touch and sight to the recognition of patterns and relationships, children move steadily along the path of sensorial development, towards learning and understanding.



Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	7

Sensorial

Introduction	18
Scope and Sequence	22

Visual Sense

Introduction	29
Introduction - Dimension	31
Activity - Knobbed Cylinder Blocks	32
Activity - Pink Tower	43
Activity - Pink Tower - Extension Charts	53
Activity - Brown Stairs	57
Activity - Brown Stairs - Extension Charts	66
Activity - Red Rods	70
Activity - Red Rods - Extension Charts	76
Activity - Knobless Cylinders	80
Activity - Knobless Cylinders - Extension Cards	92
Activity - Power of Two Cube	96
Activity - Binomial Cube	101
Activity - Trinomial Cube	109
Introduction - Geometry and Plane Figures	118
Reference - Three-Period Lesson	119
Activity - Geometric Demonstration Tray	121
Activity - Geometric Demonstration Tray: Inset to Card Matching	125
Activity - Geometric Cabinet	130
Activity - Geometric Cabinet: Inset to Card Matching	136
Activity - Geometric Cabinet Shapes Puzzle	139
Activity - Geometric Cabinet Shapes - 3-Part Cards	143
Activity - Geometric Cabinet Shapes - Blackline Booklet	148

Activity - Geometric Solids	149
Activity - Geometric Solids - 3-Part Cards	155
Activity - Geometric Solids Memory Game	159
Activity - Geometric Solids Puzzle	163
Activity - Constructive Triangles: Triangle Box	165
Activity - Constructive Triangles: Large Hexagon Box	172
Activity - Circles, Squares, and Triangles	179
Activity - Inscribed and Concentric Figures	185
Activity - Constructive Triangles: Small Hexagon Box	192
Activity - Constructive Triangles: Rectangle Box 1	199
Activity - Constructive Triangles: Rectangle Box 2	204
Activity - Blue Constructive Triangles	209
Introduction - Color	213
Activity - Primary Color Box	214
Activity - Color Matching Exercise	218
Activity - Color Mixing	223
Activity - Hue Matching Box	228
Activity - Color Grading Box	230
Activity - Color Matching Tiles	236
Activity - Color Matching Memory Game	240
Activity - Colors - 3-Part Cards	242

Tactile/Haptic Sense

Introduction	244
Activity - Rough and Smooth Tactile Boards	246
Activity - Grading Tablets	250
Activity - Touch and Match Board	256
Activity - Matching Fabric Box	260
Activity - Baric Tablets	265
Activity - Pressure Cylinders	270
Activity - Thermic Tablets	275
Activity - Thermic Bottles	281

Stereognostic Sense

Introduction	285
--------------------	-----

Activity - Sorting Objects	286
Activity - Mystery Stereognostic Bag	289
Activity - Mystery Stereognostic Geometric Shapes	293
Activity - Vegetable Memory Activity	294
Activity - Sandpaper Globe	295

Auditory, Olfactory, and Gustatory Senses

Introduction	299
Introduction - Auditory Sense	300
Activity - Sound Cylinders	301
Activity - Following Directions - The Silence Game	307
Activity - Finger Plays - <i>Itsy Bitsy Spider</i>	311
Activity - Songs - <i>Twinkle, Twinkle Little Star</i>	314
Introduction - Olfactory and Gustatory Senses	316
Activity - Smelling Bottles	317
Activity - Tasting Bottles	322
Activity - Baking Bread	328
Activity - Spices of the World Object Tray	332

Teacher Training Manual: Zoology (3-6)



Introduction

This manual offers a structured approach to introducing young learners to the study of zoology. You will find carefully sequenced lesson plans for nomenclature cards, puzzles and classification materials, and hands-on activities. These materials build upon one another, guiding children from concrete experiences with real objects and images to a deeper understanding of animals, their characteristics, and their place within the world.

The study of animals at an early age is essential, as it expands children's awareness beyond themselves and helps them recognize that many living beings share the Earth. Through these lessons, children begin to understand that animals have needs, behaviors, and roles within their environments. This manual is designed to support educators in building their knowledge of zoology so they can nurture curiosity and respect for all living things.

By guiding educators in the essential study of zoology, we hope to encourage curiosity, compassion, and a lifelong interest for knowledge, starting with our youngest learners. Together, we can nurture a generation that respects and cares for all living things, recognizing that the Earth is a shared home for all.

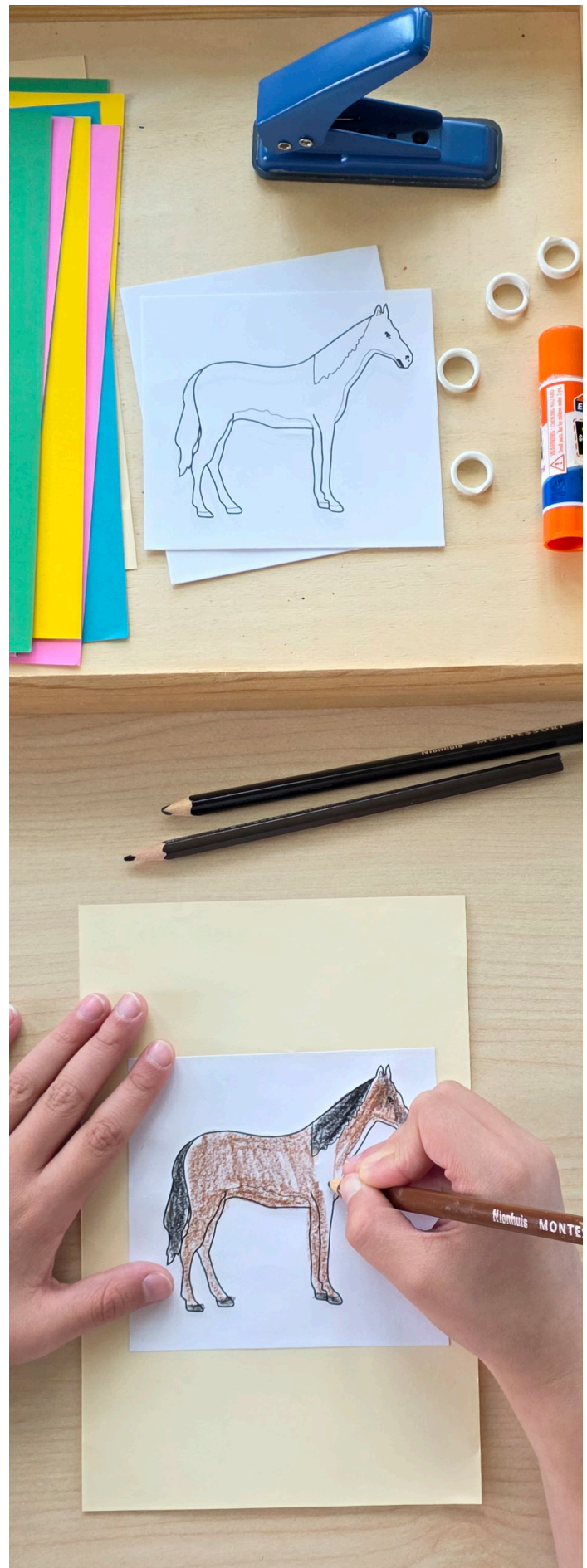


Table of Contents

Copyright Information	1
Introduction	3
Table of Contents	4
Product Index	10

Zoology

Introduction	25
Scope and Sequence	29
Zoology Around the Classroom Environment	39

Zoology Presentations

Introduction	41
Activity - Zoology Control Tray	42
Activity - Zoology Object Tray	46
Activity - Zoology Picture Basket	48
Activity - Scientific Names	51
Activity - Parts of a Horse Puzzle	55
Reference - The Three-Period Lesson	58
Activity - Parts of a Horse - 3-Part Cards	60
Activity - Parts of a Horse - Blackline Booklet	65
Activity - Parts of a Horse - Control Booklet	66
Activity - Sorting Vertebrates and Invertebrates	70
Activity - Plant, Animal, and Rock Tray	75
Activity - Plants and Animals Classification Cards	79
Activity - Field Trips	83

Characteristics of Animals

Introduction	84
Reference - Animals and Their Groups	85
Activity - Sorting Animals and Their Groups	87
Reference - Animals and Their Young	91
Activity - Sorting Animals and Their Young	93

Activity - Animals and Their Young Matching Objects	97
Activity - Animals and Their Young Matching Tiles	100
Reference - Animals and Their Gender	104
Activity - Sorting Animals and Their Gender	106
Activity - Animal Family - Horse	111
Reference - Animals and Their Voices	118
Activity - Sorting Animals and Their Voices	119
Activity - Matching Animals and Their Feet	123
Activity - Animals and Their Tracks Matching Cards	127
Activity - Animals and Their Tracks Matching Tiles	132
Activity - Animals and Their Disguises Picture Cards	136
Activity - Animal Skin Covering Classification Cards	140
Reference - Animals and Their Homes	144
Activity - Matching Animals and Their Homes	145
Activity - Continents and Their Animals Sorting Tiles	149
Activity - Animals of the Continents Classification Cards	153
Activity - Pets - Object to Picture Matching	157
Activity - Pets - Object to Silhouette Matching	161
Activity - Prehistoric Animals Matching Cards	165
Activity - Animals and Their Terrains Classification	169

Vertebrates

Introduction	175
Activity - Vertebrates Picture Basket	176
Activity - Caring for Goldfish	180
Activity - Animal Class Classification Cards	185

Fish and Aquatic Vertebrates

Introduction	189
Phylum Fish: An Introduction	190
Activity - Parts of a Fish Puzzle	191
Activity - Parts of a Fish - 3-Part Cards	194
Activity - Parts of a Fish - Blackline Booklet	196
Activity - Life Cycle of a Salmon Puzzle	197
Activity - Types of Fish Puzzle	201

Amphibians

Introduction	205
Phylum Amphibian: An Introduction	206
Activity - Parts of a Frog Puzzle	207
Activity - Parts of a Frog - 3-Part Cards	211
Activity - Parts of a Frog - Blackline Booklet	213
Activity - Life Cycle of a Frog Puzzle	214
Activity - Life Cycle of a Frog - 3-Part Cards	216

Reptiles

Introduction	217
Phylum Reptile: An Introduction	218
Activity - Parts of a Tortoise Puzzle	219
Activity - Parts of a Tortoise - 3-Part Cards	223
Activity - Parts of a Tortoise - Blackline Booklet	225
Activity - Parts of a Turtle Puzzle	226
Activity - Parts of a Turtle - 3-Part Cards	230
Activity - Parts of a Turtle - Blackline Booklet	232
Activity - Life Cycle of a Sea Turtle Puzzle	233
Activity - Life Cycle of a Sea Turtle - 3-Part Cards	235
Activity - Turtle vs. Tortoise Chart	236

Birds

Introduction	242
Phylum Bird: An Introduction	243
Activity - Parts of a Bird Puzzle	244
Activity - Parts of a Bird - 3-Part Cards	248
Activity - Parts of a Bird - Blackline Booklet	250
Activity - Types of Birds Puzzle	251
Activity - Birds and Their Eggs Puzzle	255
Activity - Birds and Their Feathers Puzzle	259
Activity - Life Cycle of a Chicken Puzzle	261
Activity - Life Cycle of a Chicken - 3-Part Cards	263
Activity - Penguins - Object to Object Matching	264

Activity - Penguins - Object to Picture Matching	267
Activity - Penguins - Object to Silhouette Matching	270

Mammals

Introduction	272
Phylum Mammal: An Introduction	273
Overview - Parts of a Horse	274
Activity - Parts of a Lion Puzzle	275
Activity - Parts of a Lion - 3-Part Cards	279
Activity - Parts of a Lion - Blackline Booklet	281
Activity - Animal Family - Lion	282
Activity - Layers of the Human Body Puzzle	289
Activity - Human Body Parts - 3-Part Cards	293
Activity - Human Body Parts - Blackline Booklet	295
Activity - Major Organs of the Human Body Puzzle	296
Activity - Major Organs of the Human Body - 3-Part Cards	299

Invertebrates

Introduction	301
Activity - Invertebrates Picture Basket	302
Activity - To Borrow a Bug	307
Activity - Building a Bug Home	310
Activity - Caring for Mealworms	315
Activity - Life Cycle of a Mealworm - 3-Part Cards	321
Activity - Parts of an Invertebrate - Building an Insect	322

Parts of Invertebrates

Introduction	328
Activity - Parts of a Mollusk Puzzle	329
Activity - Parts of a Mollusk - 3-Part Cards	332
Activity - Parts of a Mollusk - Blackline Booklet	334
Activity - Life Cycle of a Snail Puzzle	335
Activity - Parts of a Spider Puzzle	337
Activity - Parts of a Spider - 3-Part Cards	341

Activity - Parts of a Spider - Blackline Booklet	343
Activity - Life Cycle of a Spider Puzzle	344
Activity - Parts of a Grasshopper Puzzle	346
Activity - Parts of a Grasshopper - 3-Part Cards	349
Activity - Parts of a Grasshopper - Blackline Booklet	351
Activity - Life Cycle of a Grasshopper Puzzle	352
Activity - A Honeybee Society Puzzle	354
Activity - A Honeybee Society - 3-Part Cards	358
Activity - A Honeybee Society - Blackline Booklet	360
Activity - Life Cycle of a Honeybee Puzzle	361
Activity - Life Cycle of a Honeybee - 3-Part Cards	363
Activity - Parts of a Butterfly Puzzle	364
Activity - Parts of a Butterfly - 3-Part Cards	369
Activity - Parts of a Butterfly - Blackline Booklet	371
Activity - Life Cycle of a Butterfly Puzzle	372
Activity - Life Cycle of a Butterfly - 3-Part Cards	374
Activity - Butterflies of North America Puzzle	375
Activity - Butterfly Matching Cards	379
Activity - Life Cycle of a Silkworm Puzzle	382
Activity - Life Cycle of a Silkworm - 3-Part Cards	383
Activity - Parts of an Annelid Puzzle	384
Activity - Parts of an Annelid - 3-Part Cards	388
Activity - Parts of an Annelid - Blackline Booklet	390
Activity - Life Cycle of an Earthworm Puzzle	391
Activity - Life Cycle of an Earthworm - 3-Part Cards	393
Activity - Parts of a Crustacean Puzzle	394
Activity - Parts of a Crustacean - 3-Part Cards	398
Activity - Parts of a Crustacean - Blackline Booklet	400
Activity - Parts of a Sea Anemone Puzzle	401
Activity - Parts of a Sea Anemone - 3-Part Cards	404
Activity - Parts of a Sea Anemone - Blackline Booklet	406
Activity - Life Cycle of a Jellyfish Puzzle	407
Activity - Parts of an Arthropod Puzzle	409
Activity - Parts of an Arthropod - 3-Part Cards	413
Activity - Parts of an Arthropod - Blackline Booklet	415
Activity - Parts of an Echinoderm Puzzle	416

Activity - Parts of an Echinoderm - 3-Part Cards	420
Activity - Parts of an Echinoderm - Blackline Booklet	422

Classroom Environment

Practical Life	423
Sensorial	426
Language	428
Art	429
Mathematics	430