



# NatureTalks

## Mud Kitchen Curriculum

Nature-Based Learning for Families and Educators

Program Name: Mud Kitchen Explorers

Provider: NatureTalks LLC

\*\*Delivery Model: Outdoor, hands-on, nature-based instruction

Ages Served: Preschool (3–5 years) and School-Aged (6–10 years)

### Program Overview

The Mud Kitchen Curriculum is a printable, family-friendly educational program designed to support families and educators seeking enrichment that targets the whole child. Through guided, open-ended mud kitchen activities, children engage in meaningful learning experiences that support:

- Communication development
- Adaptive (daily living) skills
- Motor development
- Social-emotional learning
- Cognitive development

Instruction is play-based, developmentally appropriate, and aligned with natural environment learning principles.

# Developmental Domains Targeted

## **1. Communication Development**

### Preschool Goals:

- Naming objects and actions
- Using 2–4 word phrases
- Answering simple questions
- Participating in turn-taking conversations

### School-Aged Goals:

- Using descriptive and narrative language
- Following multi-step directions
- Asking and answering wh- questions
- Collaborative problem-solving language

### Sample Activities:

- Describe ingredients and textures
- Pretend restaurant or bakery role-play
- Create and explain a "recipe"

## **2. Adaptive Development (Daily Living Skills)**

### Preschool Goals:

- Following simple routines
- Using tools appropriately
- Cleaning up materials
- Handwashing routines

### School-Aged Goals:

- Independent task completion
- Managing materials and time
- Organizing tools
- Responsibility for shared space

### Sample Activities:

- Washing hands before/after play
- Sorting and returning tools
- Putting on/off aprons or gloves

## **3. Motor Development**

### Preschool Goals:

- Scooping, pouring, stirring
- Digging and carrying small containers
- Developing hand strength and coordination

### School-Aged Goals:

- Controlled pouring and measuring
- Bilateral coordination
- Carrying heavier buckets safely
- Improved endurance and balance

### Sample Activities:

- Mixing mud with utensils
- Carrying water from source to kitchen
- Digging and transferring materials

#### 4. Social-Emotional Development

Preschool Goals:

- Parallel and cooperative play
- Emotional expression
- Turn-taking
- Developing confidence

School-Aged Goals:

- Cooperative group roles
- Conflict resolution
- Emotional regulation
- Leadership and empathy

Sample Activities:

- Group cooking projects
- Assigning roles (chef, server, builder)
- Sharing materials and ideas

#### 5. Cognitive Development

Preschool Goals:

- Cause and effect exploration
- Early problem-solving
- Sorting and categorizing
- Counting and measuring

School-Aged Goals:

- Planning and sequencing
- Hypothesis testing
- Executive functioning
- Creative design and innovation

Sample Activities:

- Experimenting with water ratios
- Designing recipes
- Predicting outcomes

## Weekly Printable Lesson Structure

### **Week 1: Sensory Exploration & Vocabulary**

- Explore mud textures and materials
- Label items and actions
- Introduce basic routines

### **Week 2: Pretend Play & Social Learning**

- Restaurant or bakery play
- Role assignment
- Cooperative projects

### **Week 3: Measuring & Problem-Solving**

- Scoops, cups, and comparisons
- Trial-and-error learning
- Counting and estimating

### **Week 4: Creativity & Storytelling**

- Create a signature dish
- Explain the process
- Reflect on learning

### **Materials List (Printable)**

- Mud, soil, sand
- Water source
- Buckets, bowls, spoons, whisks
- Measuring cups
- Natural materials (leaves, sticks, stones)
- Aprons or old shirts

### **Assessment & Documentation**

Families and educators may document progress through:

- Photos of completed activities
- Child explanations or storytelling
- Checklists of completed skills
- Educator or parent observation notes

# Educational Outcome Statement

This curriculum provides Arizona ESA families with a structured, developmentally aligned, nature-based learning experience that supports academic readiness, life skills, and social-emotional growth for preschool and school-aged learners.

**Printable Use:** This curriculum may be printed, shared with families, or used as a flexible learning guide across home, school, therapy, and community settings.

## Educational Materials & Purchasing Guidance

**Educational Classification:** Playground Equipment / Educational Toys (Supplemental Materials)

This curriculum may be used as documentation that a mud kitchen is a required educational material when classified as playground equipment or educational toys, commonly recognized as supplemental instructional materials when paired with a curriculum.

**Purpose of Documentation:**

- Demonstrates that the mud kitchen is not recreational only, but instructionally necessary
- Defines specific learning objectives across communication, adaptive, motor, social-emotional, and cognitive domains
- Establishes structured lessons, materials, and measurable skills tied to the use of the mud kitchen

**Instructional Rationale:**

The mud kitchen functions as a multi-domain instructional tool enabling hands-on learning, problem-solving, language development, and social collaboration. Removal of the mud kitchen would significantly limit the educational activities outlined in this curriculum.

**Use with Purchase Requests:**

This curriculum may accompany purchase documentation to show that the mud kitchen is required to implement the educational activities described herein.

## Skill Checklists by Developmental Domain

### Communication Skills Checklist

Preschool (3–5 years):

- Names materials and tools
- Uses 2–4 word phrases during play
- Follows 1–2 step directions
- Takes turns in simple conversations
- Answers basic who/what questions

School-Aged (6–10 years):

- Uses descriptive language
- Explains steps of an activity
- Asks and answers wh- questions
- Participates in collaborative dialogue
- Retells or narrates play experiences

### Adaptive (Daily Living) Skills Checklist

Preschool (3–5 years):

- Washes hands with support
- Uses tools appropriately
- Participates in clean-up routines
- Follows basic activity routines

School-Aged (6–10 years):

- Completes tasks independently
- Organizes materials
- Demonstrates responsibility for shared space
- Manages transitions with minimal support

### Motor Skills Checklist

Preschool (3–5 years):

- Scoops, pours, and stirs materials
- Uses two hands together
- Digging and carrying small containers
- Demonstrates emerging hand strength

School-Aged (6–10 years):

- Demonstrates controlled pouring and measuring
- Uses bilateral coordination effectively
- Carries materials safely
- Demonstrates balance and endurance outdoors

### Social-Emotional Skills Checklist

Preschool (3–5 years):

- Engages in parallel or cooperative play
- Shares materials with support
- Expresses emotions verbally or nonverbally
- Demonstrates confidence in play

School-Aged (6–10 years):

- Participates in group roles
- Demonstrates empathy and perspective-taking
- Resolves minor conflicts with support
- Shows emotional regulation during challenges

### Cognitive Skills Checklist

Preschool (3–5 years):

- Demonstrates cause-and-effect understanding
- Sorts materials by type or size
- Counts scoops or items
- Attempts problem-solving

School-Aged (6–10 years):

- Plans and sequences activities
- Predicts outcomes
- Experiments with variables
- Demonstrates flexible thinking and creativity