

# MISSOURI EARLY LEARNING STANDARDS (MELS)

Birth to Age Five

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# Introduction

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These standards are consistent with current research and recommendations from other state and national initiatives. The MELS are not a curriculum but a framework for communicating a shared set of expectations for children as they grow and develop. Some children will develop in accordance with these standards, and others will exceed them. It is important to recognize that children learn and develop in their own unique ways. While research demonstrates these standards are appropriate for most children, it is the responsibility of adults to assess and build on the strengths of each child. Adults can use these standards to support the safe and healthy development of a child from the time they are born until they enter kindergarten.

These standards were developed from 2001 to 2005 by a group of individuals whose backgrounds are representative of the early childhood community in Missouri, including classroom teachers, child care providers, parent educators, content experts, higher education faculty, and state and partner agency staff. The MELS were updated in 2013 to include infants and toddlers. This current edition includes examples and activities to provide further clarification.

# Audience

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The standards are intended to be used in a variety of early childhood settings by a variety of individuals, including parents, parent educators, child care providers, Head Start, and public and/or private school teachers.

## **Families**

Family members are the child's first and most important teachers. The goal of the MELS is to support families in setting up their child for success in school and in life. Families are encouraged to work with their child's teacher, child care professional, home visitor, and/or parent educator to assist their child in developing the skills, attitudes and habits necessary to meet development goals across all areas. When caregivers and early childhood professionals form partnerships, they can assist each other through the important journey of a child's development.

## **Professionals**

The intent of the MELS is to provide guidance to early childhood professionals about the developmental sequence of learning for infants, toddlers and preschool-age children. This document is meant to support professionals as they create developmentally-appropriate learning opportunities and environments for young children, preparing them for success in school and in life. The information in this document can also help support professionals in their conversations with families.

# APPROACHES TO LEARNING

**Approaches to Learning** involves how a child learns, as well as, the skills and behaviors that the child uses while learning. The child's approaches to learning influence development in all areas and directly contribute to the child's success in school and in life. Supporting the child to develop successful approaches to learning helps them acquire knowledge and learn new skills. A well-planned learning environment filled with caring adults and thoughtfully designed activities helps the child develop confidence, persistence and problem-solving skills, which strengthen the child's approach to learning.



## Components:

- I. Approaches to Learning
  - A. Show Curiosity
  - B. Take Initiative
  - C. Exhibit Creativity
  - D. Show Confidence
  - E. Display Persistence
  - F. Use Problem-Solving Skills



## I. Approaches to Learning

### A. Show Curiosity

1. Express interest in people
2. Show interest in learning new things and trying new experiences
3. Ask questions

#### An infant may . . .

Respond excitedly to people by kicking their feet, waving their arms, smiling or making noises  
Consistently look at, reach for and mouth objects  
Smile, coo, grunt, babble or cry to communicate

#### Adults may . . .

Make eye contact and talk to the child using animated facial expressions and descriptive language  
Encourage the child to explore the environment while staying close and offering reassurance  
Provide a variety of age-appropriate toys

#### A toddler may . . .

Observe and interact with others  
Show concern for the feelings of others  
Explore their environment  
Practice new skills and develop independence while taking appropriate risks  
Ask questions, such as “Why?”

#### Adults may . . .

Provide safe toys that offer a variety of experiences, such as nesting toys, balls and stacking toys  
Discuss what the child is seeing and experiencing in their environment  
Provide opportunities for the child to play along side peers



## I. Approaches to Learning

### A. Show Curiosity

1. Express interest in people
2. Show interest in learning new things and trying new experiences
3. Ask questions

#### A preschooler may . . .

Ask about others

Develop personal interest in topics, such as trains, dinosaurs and dolls

Experiment with toys, using trial and error

Ask questions

Ask others for personal information, such as “What’s your name?”

#### Adults may . . .

Arrange play “dates”

Ask the child questions and share personal experiences

Provide a safe and organized environment where the child can develop independence and try new things



# I. Approaches to Learning

## B. Take Initiative

1. Initiate interaction with others
2. Make decisions independently
3. Develop independence during activities, routines and play

<b>An infant may . . .</b>
Smile, grunt, babble, cry and coo at familiar people Show a preference for familiar objects, such as a favorite blanket or pacifier Roll over Crawl, scoot or move toward others Reach for toys and objects
<b>Adults may . . .</b>
Initiate interactions by smiling, singing and playing interactive games, such as Pat-a-Cake Provide age-appropriate toys and materials, such as a mobiles, mirrors and musical toys Respond to the child's communication attempts in a timely manner
<b>A toddler may . . .</b>
Request, verbally or non-verbally, for familiar adults to sing, read or play Move or run toward familiar caregivers, friends or family members Express likes and dislikes Attempt to complete age-appropriate tasks, such as putting on socks and picking up toys
<b>Adults may . . .</b>
Ask questions and describe actions to validate and expand on what the child is doing such as, "You are filling the bucket with blocks." Provide ample time, space, materials and interactions for open-ended play Provide opportunities for the child to interact with others





## I. Approaches to Learning

### B. Take Initiative

1. Initiate interaction with others
2. Make decisions independently
3. Develop independence during activities, routines and play

#### A preschooler may . . .

Participate in group activities and games  
Offer to help with tasks, such as setting the table or feeding a pet  
Select materials for a project  
Repeatedly ask for a favorite book to be read  
Hang-up personal belongings or put them in designated place  
Ask a friend to join in play

#### Adults may . . .

Model desired behaviors or facilitate joining play, such as asking a friend to play or sharing ideas  
Provide opportunities for partner activities, small group experiences and group games  
Talk about decisions and their outcomes, such as having cold feet if the child decides to wear sandals in cold weather  
Offer two positive choices by asking questions, such as “Do you want to eat peas or carrots for lunch?”  
Provide a variety of materials  
Assign the child chores, such as watering plants and caring for pets



# I. Approaches to Learning

## C. Exhibit Creativity

1. Try new ways of doing things
2. Use imagination to generate a variety of ideas
3. Exhibit sense of humor

<b>An infant may . . .</b>
Grab or kick an object to watch what happens Move their body in new and different ways, such as turning their head, reaching, grabbing or rolling Giggle or laugh Attempt to use words, sounds and gestures to express their needs Engage in a variety of experiences, such as crawling, climbing and looking at books
<b>Adults may . . .</b>
Encourage the child to move or clap to different kinds of music Play face-to-face games, such as Pat-a-Cake, Peek-a-Boo and This Little Piggy Move the child to a new location during tummy time
<b>A toddler may . . .</b>
Move their body in new and different ways, such as tiptoeing, reaching, balancing and jumping Sing Act out roles in pretend play Create artwork with age-appropriate materials Use objects for multiple purposes, such as using a block as a car Laugh with adults
<b>Adults may . . .</b>
Provide materials, such as art supplies, dress up clothes and blocks Sing familiar songs and make up silly songs Encourage the child to dance and move



## I. Approaches to Learning

### C. Exhibit Creativity

1. Try new ways of doing things
2. Use imagination to generate a variety of ideas
3. Exhibit sense of humor

#### A preschooler may . . .

Complete projects differently than others  
Use materials in new ways  
Invent new activities and games  
Suggest new rules for a familiar game  
Make up jokes  
Laugh at a funny story  
Make up silly songs or stories  
Create new dance moves  
Engage in pretend play

#### Adults may . . .

Provide plenty of time, space and materials for play  
Wonder aloud by asking questions, such as "What if we tried it this way?"  
Read books using different voices for the characters  
Sing and dance to a variety of music with the child  
Tell silly stories



# I. Approaches to Learning

## D. Show Confidence

1. Express ideas and opinions
2. View self as competent and has a positive self-image

An infant may . . .
Show a preference for familiar objects, such as a favorite blanket or pacifier
Follow objects with their eyes
Discover and play with their feet
Point, reach or gesture to show what they want or need
Move from one place to another by crawling, walking, rolling or pulling
Clap their hands to show excitement

Adults may . . .
Imitate facial expressions, such as smiling, sticking out their tongue or making funny faces
Support the child's need for reassurance by soothing, rocking, feeding and singing to them
Acknowledge and respond to the child's needs and wants, using phrases such as, "I see that you're reaching for your sippy cup. Would you like more to drink?"

A toddler may . . .
Use words or gestures to communicate
Choose their own clothing and dress themselves
Carry their own supplies, such as a backpack or toys
Show preference for their favorite foods
Talk and use phrases, such as "I do it."

Adults may . . .
Be patient and provide opportunities for practicing self-help skills, such as putting on coat, washing hands or cleaning up
Store age-appropriate toys and materials where the child can see and easily access them
Have conversations at the child's eye level
Identify the child's accomplishments, using phrases such as "You put your socks on by yourself."



# I. Approaches to Learning

## D. Show Confidence

1. Express ideas and opinions
2. View self as competent and has a positive self-image

<b>A preschooler may . . .</b>
Communicate likes and dislikes Suggest a solution for a conflict or problem Share ideas in a group situation, such as with family or peers Engage in challenging gross motor activities Build large and more complex structures Create more complex artwork Participate in more complex activities, such as number games, writing and science experiences
<b>Adults may . . .</b>
Ask questions and engage in conversations to encourage the child to share ideas and preferences Offer choices Observe the child during play, and seek out materials and resources to support the child's interests Identify the child's accomplishments, using phrases such as "You did it." when the child accomplishes a task



# I. Approaches to Learning

## E. Display Persistence

1. Sustain attention to a task or activity that is age-appropriate
2. Pursue challenges
3. Cope with frustration

### An infant may . . .

Repeatedly turn toward a sound or movement  
Repeat actions multiple times, such as kicking a mobile and making sounds  
Listen to a book  
Repeatedly dump and fill containers  
Repeatedly drop food from their highchair  
Self-sooth by holding on to their favorite blanket or toy

### Adults may . . .

Encourage the child to attempt to try things  
Schedule floor time for the child to safely explore their surroundings  
Provide age-appropriate objects for exploration, such as books and containers  
Offer the child a favorite blanket or toy for comfort

### A toddler may . . .

Play independently for a short period of time  
Attempt to complete a simple task, such as a simple puzzle or nesting cups  
Attempt new physical skills

### Adults may . . .

Guide and support the child to remain on task  
Provide the child with short, meaningful tasks to complete  
Store age-appropriate toys and materials where the child can see and easily access them  
Offer opportunities to practice new skills, such as completing a simple puzzle or putting on a coat



# I. Approaches to Learning

## E. Display Persistence

1. Sustain attention to a task or activity that is age-appropriate
2. Pursue challenges
3. Cope with frustration

### A preschooler may . . .

Remain engaged in an activity, such as building an elaborate block structure or playing a game  
Attend to a task regardless of distractions  
Show understanding when a peer accidentally knocks down their block structure  
Lose a game without getting upset  
Persist in trying to complete a task after many attempts have failed, such as tying shoes

### Adults may . . .

Provide ample time, space, materials and interactions for play  
Offer opportunities to work on new skills, such as riding a tricycle or building an elaborate structure with blocks  
Model deep breathing when the child is crying or frustrated  
Guide the child to remain on task  
Assign meaningful chores for the child to complete



# I. Approaches to Learning

## F. Use Problem-Solving Skills

1. Recognize problems
2. Try to solve problems
3. Work with others to solve problems

### An infant may . . .

Cry or vocalize to communicate their needs such hunger or sleep  
Reach for or kick an object or toy  
Comfort themselves by sucking on their finger or holding a blanket  
Attempt to make things work such as, a musical toy  
Reach for or point to desired objects, such as a cracker or toy

### Adults may . . .

Verbalize the problem and what to do about it, using phrases such as “Uh-oh, I dropped your blanket. Let’s pick it up, and put it over here.”  
Model desired behavior when problems arise or things do not go as planned

### A toddler may . . .

Notice when something is different or out of the ordinary  
Verbalize that there is a problem  
Ask for help  
Change their behavior in response to problem  
Attempt to take turns with others

### Adults may . . .

Suggest solutions to help formulate thoughts and problem-solving skills when the child is frustrated, asking questions such as “Can you walk around the table and reach the toy?”  
Provide encouragement  
Support the child when they are trying new activities  
Put words to the their actions, using phrases such as “I am going to pick up this toy so that I don’t step on it”





# I. Approaches to Learning

## F. Use Problem-Solving Skills

1. Recognize problems
2. Try to solve problems
3. Work with others to solve problems

### A preschooler may . . .

State a personal problem, such as “I can’t get my jacket zipped.” or “I can’t find the purple marker.”  
Anticipate potential for problems, using phrases such as “If I climb too high, I won’t be able to get down.”  
Recall a previous problem and the solution  
Participate in decision making  
Take turns or share with others

### Adults may . . .

Read books and talk about the problem in a story  
Provide puzzles and toys that require the child to use problem-solving skills  
Challenge the child to find a different way to do something  
Model planning behaviors, using phrases such as “First we need to put your coat on and then we can go outside.”  
Provide appropriate but challenging gross motor play

# SOCIAL-EMOTIONAL DEVELOPMENT

**Social-Emotional Development** is the child's ability to express and manage their emotions, as well as, their ability to establish positive and rewarding relationships with others. As the child develops a sense of personal identity, which starts at birth, they begin to recognize the characteristics that make them unique as individuals. They also begin to build self-esteem. Social-emotional development includes a child's ability to initiate and sustain relationships with adults and peers. A child who experiences respectful and cooperative relationships develops trust, security and confidence. These respectful and cooperative relationships allow the child to gain a sense of belonging as a member of a family, school and community.



## Components:

- I. Knowledge of Self
  - A. Exhibit Self-Awareness
  - B. Develop Self-Control
  - C. Develop Personal Responsibility
- II. Knowledge of Others
  - A. Build Relationships of Mutual Trust and Respect with Others
  - B. Work Cooperatively with Others



## I. Knowledge of Self

### A. Exhibit Self-Awareness

1. Show respect for self
2. Develop personal preferences
3. Know personal information

#### **An infant may . . .**

Make eye contact with a caregiver

Look at their hands and feet

Express their likes and dislikes by using gestures, facial expressions or words

Respond to their name

Show preference for familiar people, places or things

#### **Adults may . . .**

Hold, rock and talk to the child

Describe the child's actions, using phrases such as "You grabbed your toes."

Offer choices, such as different types of food, toys or books

Make eye contact and use the child's name when holding them or playing with them

Create a safe and comfortable environment

Name familiar people, places or things, such as "This is Grandma's house." or "Here is your bottle."

#### **A toddler may . . .**

Have a comfort toy or object

Express pride in their accomplishments by smiling, clapping their hands or dancing in place

Show a strong desire for independence by shaking their head, turning away or using phrases such as "Me do it."

#### **Adults may . . .**

Recognize and support the child's need for a special object with phrases such as "You are tired, let's get your blanket."

Create a safe environment for the child to explore and try new things

Model desired behaviors and let the child do things on their own, such as feed themselves or pick up toys



## I. Knowledge of Self

### A. Exhibit Self-Awareness

1. Show respect for self
2. Develop personal preferences
3. Know personal information

#### **A preschooler may . . .**

Know personal information, such as their name, their age and the names of significant adults

Have a favorite song or book

Sing or read along with their favorite song or book

Take care of their basic needs, such as brushing their teeth, dressing themselves or getting a drink of water

Perform simple chores, such as feeding the dog, setting the table or putting away materials after they are done using them

Stand up for their rights and express their needs

Describe themselves using basic characteristics

#### **Adults may . . .**

Assign a simple chore or task

Store the child's clothes, jackets and shoes within their reach

Have conversations about family members and other significant adults

Provide access to a variety of games, books, songs and toys

Encourage the child to express their needs and wants by asking questions, such as "Would you like to play?" or "Do you need a drink?"

Identify physical characteristics, using phrases such as "You have brown eyes like your mother."



## I. Knowledge of Self

### B. Develop Self-Control

1. Follow simple rules
2. Accept transitions and follow daily routines
3. Express feelings through appropriate gestures, action and language
4. Adapt to different environments

#### **An infant may . . .**

Calm down after being spoken to, rocked or sung to with a soothing voice

Coo or babble

Seek closeness to a familiar person

Understand that some things are not okay to touch

Cry when they are hungry, tired or need a diaper change

#### **Adults may . . .**

Be consistent, loving and give the child attention

Have the child's comfort items available to them and encourage their use to help the child regain composure

Respond to the child when crying and offer support, using phrases such as "I see you're tired. Let's rock, then I will move you to your crib to rest."

Talk to the child about routines as they happen, using phrases such as "First, I am going to wipe you, then we will put on a clean diaper."

#### **A toddler may . . .**

Try to help or give comfort when others are distressed

Seek comfort from familiar adults when they are afraid

Be redirected and follow simple directions

Follow a daily routine

#### **Adults may . . .**

Explain simply why some things are not safe, using phrases such as "If you pull the cat's tail, it may scratch you."

Discuss upcoming transitions, using phrases such as "Let's find your teddy bear. It's almost naptime." or "Five more minutes to play, then it is clean up time."

Keep daily routines consistent and predictable, completing them in the same order at approximately same time



## I. Knowledge of Self

### B. Develop Self-Control

1. Follow simple rules
2. Accept transitions and follow daily routines
3. Express feelings through appropriate gestures, action and language
4. Adapt to different environments

#### **A preschooler may . . .**

Recognize and follow rules in a variety of settings, such as home, school or the grocery store

Recognize and follow safety rules

Recognize and participate in daily routines

Share in the happiness or success of others

Offer help to someone who is hurt

Separate easily from familiar adults

#### **Adults may . . .**

Provide simple rules

Explain the purpose of rules, using phrases such as “Rules are to help keep you safe.”

Model desired behavior during stressful situations, teach the child to pause and take calming breaths before responding

Establish routines and a consistent daily schedule

Explain appropriate behaviors for new settings before the child enters them, using phrases such as “Use your quiet voice during the recital.”

Offer comfort to the child when they are upset, asking questions such as “What would help you feel better?”

Model appropriate gestures, actions and language during pretend play



## I. Knowledge of Self

### C. Develop Personal Responsibility

1. Care for personal and group belongings
2. Begin to accept the consequences of their own actions

#### An infant may . . .

Not developmentally appropriate for this age

#### Adults may . . .

Show the child how to handle materials with care, such as toys and books

Identify emotions when the child is sad, happy or excited, using phrases such as “I can see you are crying. Do you need changed?”

#### A toddler may . . .

Pick up toys with help

Put their backpack, coat or shoes in their designated spaces

Handle books carefully

Try to help clean up a spill

#### Adults may . . .

Model desired behaviors and help the child put away their belongings

Show the child how to handle materials with care, such as toys and books

Offer comfort and reassurance when the child is frustrated or upset

Teach the child strategies to manage their emotions, such as counting to five and taking deep breaths



## I. Knowledge of Self

### C. Develop Personal Responsibility

1. Care for personal and group belongings
2. Begin to accept the consequences of their own actions

#### **A preschooler may . . .**

Handle books and other objects carefully

Put away their belongings and materials

Complete their personal care routines, such as toileting, washing hands and eating

Take ownership of their actions

#### **Adults may . . .**

Show the child the appropriate places for their belongings and help them put away their things, such as clothing and toys

Encourage the child to put their toys and belongings away independently

Commend the child when they admit wrongdoing, using phrases such as “Thank you for telling me what happened.

Whenever there is a problem, I am always here to help if you need me.”

Share daily chores with the child

Model how to handle books and materials carefully

Help the child understand the consequences of their actions, using phrases such as “Do you see Charlie’s face? He is crying. You hurt him when you pulled his hair. Let’s see what he needs to feel better.” or “You splashed water on the floor. Help me wipe it up so our friends don’t slip in it and get hurt.”





## II. Knowledge of Others

### A. Build Relationships of Mutual Trust and Respect with Others

1. Respect rights of others
2. Seek comfort and security from significant adults
3. Develop friendships
4. Use courteous words and actions
5. Respect similarities and differences among people

#### **An infant may . . .**

Recognize and smile, kick or clap to familiar adult voice  
Calm to a gentle touch  
Respond to familiar faces by smiling, moving hands and feet, and vocalizing  
Seek attention from familiar adults  
Say or use gestures, such as “hi” or “bye”

#### **Adults may . . .**

Provide warm, loving and consistent care  
Hold and comfort the child  
Be sensitive to the child’s needs, responding quickly and positively  
Describe what is happening, using phrases such as “I am leaving the room, but I will be right back.”

#### **A toddler may . . .**

Share toys or objects with support from an adult  
Seek help from adults  
Show preference for specific children or adults  
Show concern for another child who is upset  
Say “please,” “thank you,” “hello” and “goodbye”

#### **Adults may . . .**

Be attentive to the child’s verbal and nonverbal cues  
Maintain eye contact when feeding or interacting with the child  
Encourage turn-taking using phrases, such as “After she finishes her turn on the swing, then it will be your turn.”  
Focus on the child’s desirable and positive behavior, using phrases such as “You picked up your toys. That is helpful.”



## II. Knowledge of Others

### A. Build Relationships of Mutual Trust and Respect with Others

1. Respect rights of others
2. Seek comfort and security from significant adults
3. Develop friendships
4. Use courteous words and actions
5. Respect similarities and differences among people

#### **A preschooler may . . .**

Recognize that individuals have different religions, cultures, traditions and abilities  
Respect the personal space of others  
Use an adult as a resource  
Follow adults' guidelines  
Seek comfort and security from familiar adults  
Play cooperatively with other children  
Understand their behavior has an effect on others

#### **Adults may . . .**

Model calmness by pausing when they are upset and focusing on what they want the child to do, using phrases such as "Use gentle hands."  
Hold, comfort and say goodbye when dropping the child off with another caregiver  
Provide time for the child to play with others  
Read stories about families  
Plan projects that allow the child to work with others  
Discuss likes and dislikes  
Use timers, sign-up sheets and other tools to promote cooperation  
Talk with the child about friends and friendship



## II. Knowledge of Others

### B. Work Cooperatively with Others

1. Participate successfully as a member of a group
2. Share experiences and ideas with others
3. Begin to examine a situation from another person's perspective
4. Resolve conflicts with others

#### **An infant may . . .**

Not developmentally appropriate for this age

#### **Adults may . . .**

Provide opportunities to be around teachers and other children, using phrases such as "Here is our friend Johnny."

Include the child in activities with the family

Have conversations, using phrases such as "You are going to see Miss Beth today while mommy is at work."

Apologize to the child when they hurt the child's feelings

Discuss conflicts and offer solutions, using phrases such as "You both want the ball, let's find another toy for you."

#### **A toddler may . . .**

Imitate others in the family or group

Interact and play with other children

Take turns with the support of an adult

Seek an adult's help when a conflict arises

#### **Adults may . . .**

Model how to be part of a group by listening and sharing ideas

Frequently talk with the child about how they are feeling

Apologize to the child when they have hurt the child's feelings

Help the child understand the goals of others, using phrases such as "Jasmine wants to play with the doll too. Let's find another toy for you."



## II. Knowledge of Others

### B. Work Cooperatively with Others

1. Participate successfully as a member of a group
2. Share experiences and ideas with others
3. Begin to examine a situation from another person's perspective
4. Resolve conflicts with others

#### **A preschooler may . . .**

Allow others to join in play and activities

Participate cooperatively in large and small groups, sometimes as the leader and sometimes as a follower

Engage in conversation to express their own ideas

Express empathy

Adjust plans in consideration of others

Show interest in fairness and establishing rules

Attempt to make amends

#### **Adults may . . .**

Provide opportunities to play with other children and participate in group activities, such as family gatherings, school or recreational activities

Talk to the child about their ideas and feelings

Talk to the child about other's ideas and feelings

Apologize to the child when they have hurt the child's feelings

Provide opportunities for simple games

# LANGUAGE AND LITERACY

**Language and Literacy** involves the skills a young child uses to listen and communicate with others, as well as, the ability to read and write. As the child grows and develops, their speech and language skills become increasingly complex. The child learns to understand and use language to express their ideas, thoughts, and feelings, and to communicate them with others. This stage, known as emergent literacy, begins at birth and continues through the preschool years. Like language, literacy develops through the interactions the child experiences with others. As the child begins to learn how language works, they make connections between specific sounds associated with language and the environment they live in. As the child explores sound patterns and rhymes, they discover the letter/sound connections and begin to understand that our writing system is based on letters that represent speech sounds. This understanding is a crucial building block for literacy.



## Components:

- I. Spoken/Expressive Language
  - A. Use Language to Communicate
- II. Listening/Receptive Language
  - A. Listen for Different Purposes
- III. Written Language
  - A. Use Writing as a Means of Expression/Communication
- IV. Knowledge of Print and Books
  - A. Apply Early Reading Skills
- V. Sounds of Language (Phonological Awareness)
  - A. Attend to Sounds of Language



## I. Spoken/Expressive Language

### A. Use Language to Communicate

1. Use the body to communicate
2. Initiate and respond appropriately in conversation and discussions
3. Use language to pretend or create
4. Use sentences of varying length

#### **An infant may . . .**

Express their needs or wants with gestures, vocalizations or movement  
Smile, coo, grunt, babble or cry  
Make a facial expression in response to others  
Turn their head when vocalizing with an adult  
Begin to use specific sounds for objects, such as “Ba” for bottle  
Begin to string sounds together

#### **Adults may . . .**

Use animated facial expressions when talking to the child  
Describe and label the child’s feelings and movements  
Sing simple action songs and act out actions  
Provide a variety of toys and materials  
Talk with the child and encourage them to vocalize



## I. Spoken/Expressive Language

### A. Use Language to Communicate

1. Use the body to communicate
2. Initiate and respond appropriately in conversation and discussions
3. Use language to pretend or create
4. Use sentences of varying length

#### **A toddler may . . .**

Begin to combine two and three words in a series

Begin to learn the rules of speech but still make errors, using phrases such as “Me go with you.”

Initiate conversation and respond to adults and peers

Uses simple words during play, such as “Me the dog.”

Speak clearly part of the time

#### **Adults may . . .**

Describe actions in routines, using phrases such as “I’m getting the wash cloth to wipe your face.”

Elaborate on the language the child uses. For example, when the child uses phrases such as “Banana.” then the adult elaborates with phrases, such as “I like bananas too, they are yummy.”

Read books and act out the characters using different voices

Speak using basic grammar structure



## I. Spoken/Expressive Language

### A. Use Language to Communicate

1. Communicate in a variety of ways
2. Initiate and respond appropriately in conversation and discussions
3. Use language to pretend or create
4. Use complete sentences of varying length

#### **A preschooler may . . .**

Communicate their personal needs, preferences and feelings  
Use language to pretend  
Tell real and make-believe stories  
Initiate and participate in conversations with adults and peers  
Ask and answer questions  
Use complete and complex sentences  
Speak clearly

#### **Adults may . . .**

Model appropriate sentence structure and grammar  
Encourage the child to tell stories or retell their favorite stories using props  
Incorporate music and singing into daily life  
Model and practice back and forth conversations  
Plan times when the child can communicate with their peers  
Model and encourage the child to use self-talk  
Use new and elaborate words in conversations with the child  
Provide a variety of experiences, such as trips to the park, grocery store or museum





## II. Listening/Receptive Language

### A. Listen for Different Purposes

1. Listen to others
2. Listen to sounds in the environment
3. Follow simple directions
4. Listen responsively to books and stories
5. Respond to questions

#### An infant may . . .

Turn toward a familiar voice  
Smile or make a facial expression in response to others  
Turn their head or body to sound  
Look at and listen to books  
React to music and singing by kicking their feet or waving their hands

#### Adults may . . .

Make eye contact and respond when the child communicates  
Label sounds using phrases, such as “I hear a dog barking.”  
Encourage the child to wave hello or goodbye  
Read or tell stories  
Build upon the child’s effort to communicate, asking questions such as “More? You would like more milk?”



## II. Listening/Receptive Language

### A. Listen for Different Purposes

1. Listen to others
2. Listen to sounds in the environment
3. Follow simple directions
4. Listen responsively to books and stories
5. Respond to questions

#### **A toddler may . . .**

Sit, listen and sing along to their favorite stories  
Repeat words or phrases from familiar stories  
React to music, rain, thunder and other sounds  
Get a book when asked  
Respond to simple questions

#### **Adults may . . .**

Sing songs and play music  
Go on a nature walk and listen for sounds  
Read books and tell stories  
Assign the child a chore, using phrases such as "Put your toys in the basket."  
Engage the child in conversations and ask questions



## II. Listening/Receptive Language

### A. Listen for Different Purposes

1. Listen to others
2. Listen to sounds in the environment
3. Follow simple directions
4. Listen responsively to books and stories
5. Respond to questions

#### A preschooler may . . .

Participate in group activities  
Listen to music and sing songs  
Follow directions with two or more steps  
Smile, laugh or cry in response to books or stories  
Listen to multiple stories or books at a time  
Listen to and engage in conversations with others

#### Adults may . . .

Encourage child-initiated talk  
Encourage peer interactions  
Play a variety of music  
Teach and sing their favorite songs to the child  
Assign chores, using phrases such as “Put your coat on and get your backpack.”  
Make up silly words, stories and games that include rhymes  
Read and discuss stories with the child  
Tell family heritage stories and folk tales



### III. Written Language

#### A. Use Writing as a Means of Expression/Communication

1. Experiment with writing tools and materials
2. Use scribbles, shapes, pictures, letter-like forms and letters to write
3. Tell others about marks and intended meaning of drawing or writing
4. Use a variety of resources to facilitate writing

##### **An infant may . . .**

No developmentally appropriate for this age

##### **Adults may . . .**

Offer the child safe items of assorted colors, shapes, textures and sizes to grasp, reach, release and grasp again

Provide tummy-time on a safe surface

Provide sensory materials, such as sand, water or goop

Provide large crayons

Acknowledge scribbles as the child's attempts to write

##### **A toddler may . . .**

Engage in a variety of fine motor activities, such as feeding themselves, stringing large beads and building with blocks

Engage in sand and/or water play

Use fingers and hands to grasp writing tools with whole fist

Make dots, lines or scribbles on paper

##### **Adults may . . .**

Model different types of writing, such as lists, thank you notes or recipes

Provide a variety of writing materials, such as washable markers, paper and crayons

Provide fine motor materials, such as puzzles, lacing beads and building tiles

Acknowledge scribbles as attempts to write



### III. Written Language

#### A. Use Writing as a Means of Expression/Communication

1. Experiment with writing tools and materials
2. Use scribbles, shapes, pictures, letter-like forms and letters to write
3. Tell others about marks and intended meaning of drawing or writing
4. Use a variety of resources to facilitate writing

##### **A preschooler may . . .**

Use a variety of writing tools, such as crayons, markers or pencils

Use scribbles, symbols and letter-like forms to communicate ideas, write books or label pictures

Participate in writing for meaning, such as writing their name on their art work, signing up to use the computer, or writing a thank you note to a friend

Use written words in their environment to assist with writing, such as signs and cereal boxes

##### **Adults may . . .**

Provide a variety of writing materials, such as markers, crayons, pens, pencils and paper

Display and discuss the child's written work

Facilitate an author study

Provide a variety of materials, such as stapled paper or cardboard

Provide a variety of printed materials



## IV. Knowledge of Print and Books

### A. Apply Early Reading Skills

1. Show an interest in reading and books
2. Exhibit book handling skills
3. Recognize that print represents spoken words
4. Develop a sense of story
5. Read environmental print and symbols
6. Identify some alphabet letters

#### An infant may . . .

Not developmentally appropriate for this age

#### Adults may . . .

Provide vinyl, cloth or sturdy board books

Store picture books in a place where the child can reach them

Hold the child comfortably on your lap, facing out and hold a book in front them

Talk about the pictures and story in a book

Reread the child's favorite books and offer new books

Read familiar stories and pause at intervals, encourage the child to say the next word

#### A toddler may . . .

Show interest in reading and books, and ask to read the same story repeatedly

Make sounds and words using different pitches to mimic reading

Repeat words or phrases from familiar stories

Carry books

#### Adults may . . .

Read familiar stories

Choose books with short, repetitive text, rhyming phrases and predictability

Read with expression and dramatic inflection

Make connections between letters on book covers or throughout the book and in the child's name or in other familiar words

Point to and recognize familiar images, signs and logos, such as McDonald's, Taco Bell and Wal-Mart



## IV. Knowledge of Print and Books

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3. Recognize that print represents spoken words
4. Develop a sense of story
5. Read environmental print and symbols
6. Identify some alphabet letters

#### A preschooler may . . .

Read, or pretend to read, easy and predictable books  
Identify personally significant words, such as mom, dad and cat  
Retell a story  
Make predictions about books  
Relate personal history to text  
Identify characters in a book  
Identify if the a book is fiction or non-fiction  
Tell what illustrators and authors do  
Find their favorite cereal in the grocery store or find their name on a list  
Identify some letters in the alphabet, especially those in their name

#### Adults may . . .

Provide a variety of books and other reading materials  
Read aloud using expressions, such as making faces or altering voice to bring the character to life  
Ask the child questions about the book, such as the plot, characters and problems  
Point out letters in the environment, such as S. T. O. P. spells stop  
Allow the child to help put away groceries and encourage them to read the labels  
Provide and use alphabet materials, such as puzzles, magnet letters and books



## V. Sounds of Language (Phonological Awareness)

### A. Attend to Sounds of Language

1. Repeat rhymes, simple songs, poems and finger plays
2. Participate in word games
3. Discriminate some sounds in words

#### **An infant may . . .**

Experiment and play with sounds, such as clicking tongue and blowing bubbles  
Imitate simple vowel sounds, such as “ah”, “oh” and “oo”  
Point and babble with inflection to imitate adult speech  
String sounds together and mimic animal sounds

#### **Adults may . . .**

Sing and play with sounds during face-to-face interactions or routines  
Respond to sounds the child makes  
Imitate sounds the child makes

#### **A toddler may . . .**

Repeat silly sounds or make up silly words  
Mimic words they have heard  
Ask for favorite rhymes, songs, poems and finger plays

#### **Adults may . . .**

Make up and sing silly songs  
Imitate the child’s silly words  
Read nursery rhymes  
Read books with repetitive phrases or rhyming words





## V. Sounds of Language (Phonological Awareness)

### A. Attend to Sounds of Language

1. Repeat rhymes, simple songs, poems and finger plays
2. Participate in word games
3. Discriminate some sounds in words

#### A preschooler may . . .

Experiment with alliteration, such as “Sally sells seashells by the seashore.”

Recognize beginning and ending letter sounds

Identify syllables in words

Make sound-letter associations

Make up words that rhyme

Play games with letters, such as I Spy

Create new words by substituting one letter sound for another

#### Adults may . . .

Teach nursery rhymes, read poems and initiate finger plays

Encourage the child to make up silly rhymes

Clap out syllables in words

Identify the different sounds in words, such as “Your name starts with the letter B. B makes the Ba sound.”

Play simple rhyming games

# MATHEMATICS

**Mathematics** is the science of numbers and their operations. There are many ways to incorporate mathematical concepts into everyday moments. Through play and daily interactions, the child is able to increase their understanding that numbers represent quantities. Number sense is the ability to understand how numbers are used and how they are presented, as well as, the relationships among numbers. The rate at which a child learns mathematical concepts depends greatly on their experiences. Children need opportunities to explore ideas related to patterns, shapes, numbers, sorting, building, measuring, making comparisons and spatial awareness in order to develop an understanding of mathematics.



## Components:

- I. Number and Operations
  - A. Develop Number Sense
  - B. Develop Numerical Representation
- II. Geometry and Spatial Sense
  - A. Investigate Positions and Locations
  - B. Explore Shapes
- III. Patterns and Relationships (Algebra)
  - A. Develop an Awareness of Patterns
- IV. Measurement
  - A. Use Measurement
- V. Data
  - A. Explore Data





# I. Number and Operations

## A. Develop Number Sense

1. Show interest and understanding in counting
2. Explores quantity

### An infant may . . .

Listen to songs or finger plays that include counting and quantity  
Look and listen to a counting book  
Hold an object in each hand  
Place one object in each cup of a muffin tin  
Show one finger for first birthday or age one

### Adults may . . .

Point to and use the names of body parts, using phrases such as “You have two hands! One. Two.”  
Place counting and/or number toys within the child’s reach  
Sing counting songs and model finger plays  
Read picture books with concepts of numbers, counting, sizes and concepts of quantity  
Use fingers for showing quantity

### A toddler may . . .

Begin to count objects  
Use fingers to show age  
Recognize which group has more  
Sing songs with number words  
Listen to counting books  
Place puzzle pieces in an inset puzzle  
Hold an object in each hand and say “I have two.”

### Adults may . . .

Offer the child opportunities to make choices based on quantity, such as “Do you want one or two? Do you want more?”  
Count the child’s movements, such as number of jumps or steps  
Point to numerals in books and count corresponding pictures  
Count objects using fingers to show how many



## I. Number and Operations

### A. Develop Number Sense

1. Show interest and understanding in counting
2. Explores quantity

#### **A preschooler may . . .**

Rote count

Use fingers to represent numbers

Count familiar objects

Recognize quantities without counting

Compare objects and decide which has more, less or the same

Explore fractions, such as half of a cookie

Estimate the number of marbles in a jar

Recognize that if there are three friends, you need three cartons of milk

Participate in number games

#### **Adults may . . .**

Sing counting songs and number rhymes with child, such as Five Little Ducks, Ten Little Monkeys Jumping on the Bed and Here is the Beehive

Ask questions about how many, such as “How many people are in the car?”

Read number books

Play number games that involve math concepts such as counting and number recognition

Divide an sandwich and talk about it in terms of fractions, such as “I have half a sandwich.”

Use math language such as more, less and the same

Provide items for estimation jar and have the child guess how many objects are in the jar



## I. Number and Operations

### B. Develop Numerical Representation

1. Identify numerals in everyday situations
2. Use drawings to represent number
3. Write some numerals

#### An infant may . . .

Not developmentally appropriate for this age

#### Adults may . . .

Point to and use the names of body parts, such as “You have two hands! One. Two.”

Place counting and/or number toys within the child’s reach

Sing counting songs and model finger plays

Read picture books with concepts of numbers, counting, sizes and concepts of quantity

Use fingers for showing quantity

#### A toddler may . . .

Begin to say and/or use some number names

Show two fingers for age

#### Adults may . . .

Provide toys and books that represent numbers in different ways

Read counting books and point to the numerals

Point out numerals on toys and in the environment

Display numerals in the learning environment

Use counting words

Use fingers to show number



## I. Number and Operations

### B. Develop Numerical Representation

1. Identify numerals in everyday situations
2. Use drawings to represent number
3. Write some numerals

#### **A preschooler may . . .**

Draw to show size or quantity

Keep score of game using symbols or numerals

Find numerals in books, posters and signs

Match numerals with quantity

Examine a chart, identify which column has more and write the corresponding number

Play restaurant and write how much on a ticket

Identify first, second and last positions in a line

#### **Adults may . . .**

Provide play materials that have numbers, such as toy phones, magnetic numbers and recipe books

Provide materials that can be used for creating numerals, such as playdough or clay

Read and create counting and/or number books

Look for numerals outside or in the environment

Provide and play number games

Encourage writing numerals for real purposes, such as lunch count, milk count and how many children are present

Talk about who is first, second, third, etc.



## II. Geometry and Spatial Sense

### A. Investigate Positions and Locations

1. Take objects apart and puts them together
2. Use actions and words to indicate position and location
3. Use actions and words to indicate movement and orientation

#### **An infant may . . .**

Place objects in and out of an open container

Play with nesting cups

Explore by throwing, dropping, shaking and banging objects

Explore environments by rolling, scooting, crawling, cruising and walking to reach objects or places

#### **Adults may . . .**

Respond to gestures that indicate position change, asking questions such as “You want up?”

Describe positions and location, such as “It’s under the table.”

Provide a safe environment for exploration

#### **A toddler may . . .**

Complete simple puzzle

Stack small blocks

String large beads

Build with large, interlocking blocks

Follow directions that contain position and locational words, such as “Stand on the first step.”

#### **Adults may . . .**

Engage with the child as they use simple toys, such as inset puzzles, stacking toys, soft blocks and nesting cups

Use positional words, such as under, in and outside



## II. Geometry and Spatial Sense

### A. Investigate Positions and Locations

1. Take objects apart and puts them together
2. Use actions and words to indicate position and location
3. Use actions and words to indicate movement and orientation

#### **A preschooler may . . .**

Build with interlocking blocks  
Complete frame and floor puzzles  
Move themselves to show position  
Use objects to show position  
Follow a path or move through an obstacle course  
Explain where objects and/or people are located

#### **Adults may . . .**

Use positional words, such as over, under and on top  
Provide building materials, such as puzzles, blocks and marble mazes  
Describe movement and direction, using phrases such as “Run toward the fence!” or “Slide down feet first!”  
Play games, such as Simon Says and I Spy





## II. Geometry and Spatial Sense

### B. Explore Shapes

1. Investigate and talk about the characteristics of shapes
2. Identify and name some shapes
3. Create and duplicate three-dimensional and two-dimensional shapes

#### **An infant may . . .**

Focus on, reach for, bat at or grasp shapes in the environment  
Explore a shape sorter  
Stack and line up blocks to create another shape

#### **Adults may . . .**

Provide interesting shapes for the child to look at and touch  
Provide blocks, containers and interesting objects to manipulate  
Name shapes and read books with shape words

#### **A toddler may . . .**

Match basic shapes that vary in size  
Put round, square and triangular pieces into a shape sorter  
Point to a shape when named  
Draw circular scribbles  
Say “ball” to name a spherical object

#### **Adults may . . .**

Offer shape sorters and shape puzzles for exploration  
Name and describe shapes  
Read books with shape words  
Draw vertical and/or horizontal lines on paper for the child to imitate using writing tools  
Point out shapes in the environment



## II. Geometry and Spatial Sense

### B. Explore Shapes

1. Investigate and talk about the characteristics of shapes
2. Identify and name some shapes
3. Create and duplicate three-dimensional and two-dimensional shapes

#### **A preschooler may . . .**

Discuss the shapes of objects, such as “The pizza is round.”

Use materials to create shapes, such as clay, blocks and yarn

Find shapes in the environment

Combine basic shapes to create a new shape, such as two squares to make a rectangle

Play shape games, such as Tangrams

#### **Adults may . . .**

Provide shape materials, such as blocks and Tangrams

Discuss the shapes of foods while the child is eating

Go on a shape hunt with the child, which can be played inside and outside

Look for shapes of all kinds in nature and manmade

Supply the math center with pattern blocks, geoboards, shape sorters and/or table blocks

Read shape books



### III. Patterns and Relationships (Algebra)

#### A. Develop an Awareness of Patterns

1. Recognize patterns and relationships
2. Duplicate and extend patterns
3. Create patterns

##### **An infant may . . .**

Repeat patterns that make things happen, such as banging a rattle  
Participate in predictable games, such as Peek-a-Boo, Pat- a-Cake and So Big  
Listen to books with repetitive phrases

##### **Adults may . . .**

Develop routines for napping, feeding and diapering  
Point out patterns in the daily schedule, using phrases such as “After lunch we wash our hands.”  
Play singing and movement games that have predictable patterns  
Read predictable books

##### **A toddler may . . .**

Imitate a simple movement pattern, such as clap-stomp-clap-stomp  
Read repetitive books with an adult  
Create a simple pattern with help, by lining up toys or large stringing beads

##### **Adults may . . .**

Play singing and movement games with predictable patterns  
Read books with repetitive phrases, and pause to let the child join in the repetitive phrase  
Model creating patterns



### III. Patterns and Relationships (Algebra)

#### A. Develop an Awareness of Patterns

1. Recognize patterns and relationships
2. Duplicate and extend patterns
3. Create patterns

##### **A preschooler may . . .**

Discuss colors or patterns in their clothing, using phrases such as “I have red and blue stripes on my shirt.”

Recognize a pattern in a story

Repeat a pattern according to size, color and shape

Create more complex patterns using art materials or other toys

Begin to see and discuss patterns in words, such as cat, hat, mat and fat

##### **Adults may . . .**

Discuss patterns in the environment

Show the child different patterns using materials, such as blocks, beads or leaves

Play musical games that have patterns

Discuss patterns in books, charts and songs

Provide materials and objects for the child to use to create patterns



## IV. Measurement

### A. Use Measurement

1. Explore ways to measure
2. Measure using objects
3. Compare objects using measurable features
4. Use language to describe measurement

#### An infant may . . .

Not developmentally appropriate for this age

#### Adults may . . .

Discuss times of day, such as night, day, lunchtime and bedtime

Provide and follow predictable routines, such as bath, pajamas, storybook and then bedtime

#### A toddler may . . .

Use words to describe measurement, such as big, heavy, empty and full

Refer to a group of large animals as “mamas” and smaller animals as “babies”

Compare height to others

Explore size differences by playing with nesting toys or measuring cups

Imitate adults using measuring tools, such as pretending to take a “patient’s” temperature

#### Adults may . . .

Sing songs that relate sizes

Provide items of varying sizes, and describe the child’s preference, using phrases such as “You chose the big one.”

Use everyday terms for measurement, such as heavy, light, long, short, hot and cold



## IV. Measurement

### A. Use Measurement

1. Explore ways to measure.
2. Measure using objects.
3. Compare objects using measurable features.
4. Use language to describe measurement.

#### A preschooler may . . .

Talk about an object being longer than another object

Use words to describe measurement, such as short, tall, wide, hot or cold

Fill a container with solids or liquids

Explore measurements by playing with measuring cups, measuring tapes and rulers

Put objects in order objects, such as putting cars in a row according to size

#### Adults may . . .

Provide containers of different sizes for the child to fill and discuss full, empty and half-full

Help the child count how many smaller containers it takes to fill a larger one

Show the child how to use objects to measure items, such as a piece of string to measure a tower of blocks

Show the child how to use measuring tools

Discuss and use measuring terms



## V. Data

### A. Explore Data

1. Collect and organize information
2. Displays information (charts and graphs)

#### **An infant may . . .**

Not developmentally appropriate for this age

#### **Adults may . . .**

Talk about things they see

Talk about things they hear

Describe facial features

#### **A toddler may . . .**

Not developmentally appropriate for this age

#### **Adults may . . .**

Discuss objects the child collects, such as “You have two rocks.”

Respond to the child’s questions

Model organizing objects by size, color, weight, shape or texture

Describe comparisons, using phrases such as “This rock is bigger than that one.”



## V. Data

### A. Explore Data

1. Collect and organize information
2. Displays information (charts and graphs)

#### A preschooler may . . .

Collect information to answer questions or solve problems

Create a chart from gathered information, such as “How many friends want juice or milk?” or “How many friends have on boots?”

Vote on a favorite item and then communicate the results of the vote verbally or using charts

#### Adults may . . .

Ask questions, such as “I wonder how many pets live in our neighborhood?” or “How many red cars are on the street?”

Model creating charts or graphs to display information, such as favorite colors, favorite foods or pets

Vote for books to read and analyze results

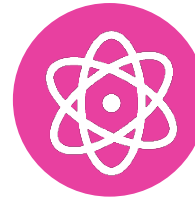
Play games, such as “Which thing doesn’t belong?”

Provide clipboards, paper, and writing tools for collecting data

Discuss what you see in everyday activities

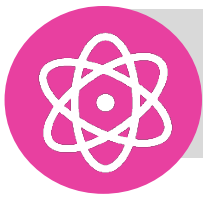


**Science** is a process of inquiry. The child's natural curiosity provides a springboard for investigations that promotes scientific thinking. Children use their senses to explore their environments. Experiences that encourage the child to investigate a variety of objects and materials helps them develop an understanding of the world around them, such as the difference between living and non-living things.



## Components:

- I. Physical Science
  - A. Explore, Investigate and Solve Problems of the Physical World
- II. Life Science
  - A. Explore, Investigate and Solve Problems of Living Things
- III. Earth Science
  - A. Explore, Investigate and Solve Problems of the Earth and Sky



## I. Physical Science

### A. Explore, Investigate and Solve Problems of the Physical World

1. Ask questions
2. Make predictions based on experiences
3. Experiment
4. Reflect on results

#### An infant may . . .

Move head toward light and/or movements  
Bat at objects  
Explore objects by mouthing  
Continuously bang and/or rattle objects to make noise  
Rub soft toys and blankets  
Attempt to use simple tools, such as cups, buckets or unbreakable mirrors

#### Adults may . . .

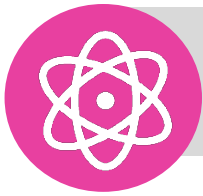
Allow the child to use their mouth, hands, feet and body to explore safe objects, such as rattles and soft blocks  
Provide a variety of items that change with wind or light, such as mobiles or sun catchers

#### A toddler may . . .

Use objects in a purposeful way, such as pushing, pulling or sliding  
Look at, bang and shake toys to see how they work  
Notice differences in textures  
Use simple tools, such as funnels, unbreakable mirror or cups

#### Adults may . . .

Provide a variety of objects that move, such as balls, pull and push toys and riding toys  
Encourage the child to experiment with objects  
Describe objects and materials, using phrases such as “This blanket is soft.”  
Provide collections of materials with different properties, such as balls that are big, small, smooth, bumpy, spherical, elliptical, heavy, light, etc.



## I. Physical Science

### A. Explore, Investigate and Solve Problems of the Physical World

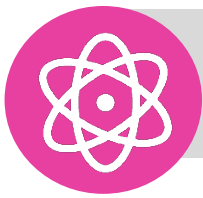
1. Ask questions
2. Make predictions based on experiences
3. Experiment
4. Reflect on results

#### A preschooler may . . .

Make connections between cause and effect when playing with marble mazes or cars and ramps  
Use tools such as ramps, magnets, scales, eyedroppers or binoculars  
Describe properties, using phrases such as “This slide is slick.”  
Notice similarities and differences of objects, using phrases such as “This ball will bounce higher.”  
Document predictions and outcomes

#### Adults may . . .

Ask the child questions about materials and/or objects, asking questions such as “How can you find out?”  
Encourage the child to experiment and explore to find answers, asking questions such as “How do you know?”  
Provide tools, such as scales, binoculars, magnifying glasses, cups, jars, and paper sacks  
Make play dough or goop  
Cook with the child



## II. Life Science

### A. Explore, Investigate and Solve Problems of Living Things

1. Ask questions
2. Make predictions based on experiences
3. Experiment
4. Reflect on results

#### An infant may . . .

Observe living things in the environment

Use their senses to investigate the environment, such as touching a dog

Move toward an object to investigate it, such as rolling toward a cat or a plant

Name familiar animals

Look at plants

Dig in the dirt to find worms

#### Adults may . . .

Provide opportunities for the child to observe and explore nature

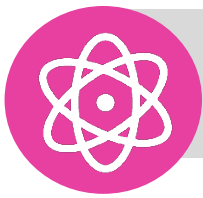
Describe what the child is doing, hearing and seeing

Provide picture books and materials with living things

Point out animals and plants

Describe how flowers smell

Plan activities to identify and make animal sounds, asking questions such as “What animal says moo?”



## II. Life Science

### A. Explore, Investigate and Solve Problems of Living Things

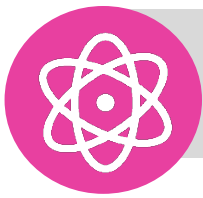
1. Ask questions
2. Make predictions based on experiences
3. Experiment
4. Reflect on results

#### A toddler may . . .

Participate in songs, finger plays and stories about living things  
Participate in nature activities  
Point to the animal in a story  
Help take care of plants or animals

#### Adults may . . .

Sing songs about animals and sounds, such as Old McDonald had a Farm  
Provide a variety of non-fiction books with pictures of real living things  
Hang a bird feeder by a window where the child can observe it  
Plant an herb or vegetable garden with the child  
Have the child care for a plant and observe its growth  
Help the child pick vegetables and let them eat them for a snack  
Go outside often with the child



## II. Life Science

### A. Explore, Investigate and Solve Problems of Living Things

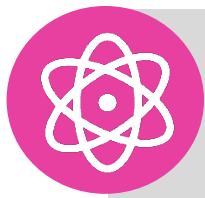
1. Ask questions
2. Make predictions based on experiences
3. Experiment
4. Reflect on results

#### A preschooler may . . .

Look for insects  
Help plant and harvest a garden  
Compare plants and animals, using phrases such as “These are farm animals.”  
Describe what they know about animals  
Know that living things need water and food  
Take care of plants or animals  
Play outside

#### Adults may . . .

Allow time for the child to observe living things  
Allow the child to take care of plants or animals  
Discuss what plants and animals need to survive  
Provide opportunities to observe animals in various stages of their life cycle, such as a frog, chicken or butterfly  
Ask open-ended questions, such as “Why do you think this is growing on the tree?”  
Go on a nature walk with the child  
Go outside often with the child



### III. Earth Science

#### A. Explore, Investigate and Solve Problems Involving Properties of the Earth and Sky

1. Ask questions
2. Make predictions based on experiences
3. Experiment
4. Reflect on results

##### **An infant may . . .**

Turn their head or respond to the sound of rain or thunder  
Use senses to explore earth materials, such as sand, dirt and water  
Respond to weather conditions with actions, such as hiding eyes in bright sun

##### **Adults may . . .**

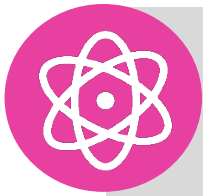
Provide books with real pictures of the sun, sky, stars, moon, trees and flowers  
Provide opportunities for the child to use safe earth materials, such as large rocks, wood, soil and leaves  
Discuss the weather

##### **A toddler may . . .**

Play in the sand, dirt or water using tools, such as scoops or shovels  
Observe the clouds, moon and stars  
Play with their shadow  
Use words to name weather conditions, such as rainy, cold or hot  
Question interactions with weather, asking questions such as "Why can't we go outside?"  
Observe the weather by listening to the rain, pointing to snow or jumping when they hear thunder

##### **Adults may . . .**

Provide a variety of common earth materials, such as sand, dirt and water  
Name weather conditions using words, such as gusty, breezy, drizzle and blowing  
Read books with real pictures of the earth and sky



### III. Earth Science

#### A. Explore, Investigate and Solve Problems Involving Properties of the Earth and Sky

1. Ask questions
2. Make predictions based on experiences
3. Experiment
4. Reflect on results

##### **A preschooler may . . .**

Identify or label characteristics of earth materials, such as sand, dirt and water

Notice different weather conditions

Use tools to investigate properties of the earth, such as pinwheels, magnifying glasses or prisms

Participate in activities related to the earth, such as making mud, looking at stars and making sand castles

Help with recycling or conservation activities

Notice seasonal changes

##### **Adults may . . .**

Read aloud books and magazines about the earth and sky

Provide books and magazines about the earth and sky

Use weather vocabulary

Provide opportunities to play with dirt, sand and mud

Ask open-ended questions, such as “Why do you think the puddle is gone?”

Encourage the child to make observations and comparisons about the sky, weather and seasons

Discuss recycling



# PHYSICAL DEVELOPMENT

**Physical Development** is the child's ability to use the body with increasing purpose, control and skill. It is important to keep physical activities short, simple and reflective of the child's interests and abilities. Enthusiasm for an activity is more important for a young child's development than skill level. When the child's early experiences with physical development and movement are successful, then the child builds confidence and has fun; these experiences result in the child being more likely to remain physically active throughout life.



## Components:

- I. Physical Development and Coordination
  - A. Use Gross Motor Skills with Purpose and Coordination
  - B. Use Fine Motor Skills with Purpose and Coordination
  - C. Respond to Sensory Input to Function in the Environment
- II. Health
  - A. Practice Healthy Behaviors
- III. Safety
  - A. Practice Safe Behaviors





## I. Physical Development and Coordination

### A. Use Gross Motor Skills with Purpose and Coordination

1. Control body movements
2. Use large muscle movements to manipulate objects
3. Move from one point to another

#### An infant may . . .

Roll, scoot or nudge to move around the environment  
Roll from their back to tummy and back again  
Lift their head and turn it from side to side  
Bring their hands to their mouth  
Sit with support  
“Cruise” along furniture or walls  
Stand alone  
Walk with help and then alone  
Crawl up steps and climb over low objects  
Bang two objects together  
Throw objects without accuracy

#### Adults may . . .

Provide tummy time in an open floor space  
Place toys just outside of the child’s reach to encourage exploration and movement  
Provide age-appropriate equipment for climbing, such as stairs  
Provide space for large muscle movement



## I. Physical Development and Coordination

### A. Use Gross Motor Skills with Purpose and Coordination

1. Control body movements
2. Use large muscle movements to manipulate objects
3. Move from one point to another

#### A toddler may . . .

Walk forwards and backwards  
Straddle and ride toys without pedals  
Climb on structures  
Walk up and down stairs using alternating feet  
Squat, stoop or bend  
Jump with both feet off the floor  
Try to balance on one foot  
Attempt to throw, catch and kick a ball

#### Adults may . . .

Provide opportunities to explore  
Provide ample space and a variety of riding toys  
Play with the child and encourage walking, bending and jumping



## I. Physical Development and Coordination

### A. Use Gross Motor Skills with Purpose and Coordination

1. Control body movements
2. Use large muscle movements to manipulate objects
3. Move from one point to another

#### A preschooler may . . .

Walk, run, jump, gallop and hop on one foot

“Stop” or “freeze” and then change directions while playing a game

Bend, stretch, turn and twist their body

Balance on one foot

Throw, kick, bounce and catch a ball

Ride a tricycle, bicycle or wheeled toy with pedals

#### Adults may . . .

Encourage running, jumping and galloping along lines

Introduce movement games to practice controlled movement, such as Simon Says

Practice a variety of motor skills to music, such as bending, twisting, stretching and freezing

Provide ample time and space for vigorous outdoor and indoor play



## I. Physical Development and Coordination

### B. Use Fine Motor Skills with Purpose and Coordination

1. Use fingers and hands to accomplish fine motor tasks
2. Use tools in a functional manner
3. Exhibit coordination of facial muscles

#### An infant may . . .

Hold an adult's finger  
Pass an object from one hand to another  
Rake objects with hands  
Reach for and hold an object, such as a rattle  
Use hands to feed themselves  
Pick up objects with thumb and forefinger using a pincer grasp  
Empty containers  
Coo, smile and frown

#### Adults may . . .

Provide objects for the child to reach for and hold  
Encourage the child to point to pictures in books  
Offer tools to squeeze and pinch, such as tongs, tweezers and turkey basters  
Say or sing finger plays and help the child with actions  
Help the child learn to put on socks, brush teeth and drink from a cup



## I. Physical Development and Coordination

### B. Use Fine Motor Skills with Purpose and Coordination

1. Use fingers and hands to accomplish fine motor tasks
2. Use tools in a functional manner
3. Exhibit coordination of facial muscles

#### A toddler may . . .

Imitate finger plays  
Fasten and unfasten clothing  
Begin to use a spoon and fork  
Turn pages of a book, one-by-one  
Imitate facial expression

#### Adults may . . .

Encourage the child to join in finger plays  
Show the child how to put on a coat, socks and shoes  
Show the child how to use a spoon and fork  
Read with the child using expressive movements, such as funny faces



## I. Physical Development and Coordination

### B. Use Fine Motor Skills with Purpose and Coordination

1. Use fingers and hands to accomplish fine motor tasks
2. Use tools in a functional manner
3. Exhibit coordination of facial muscles

#### A preschooler may . . .

Fasten buttons, zip zippers or snap snaps independently  
Build with small connecting blocks  
Create art using tools, such as paintbrushes and scissors  
Use writing tools  
Use eating utensils  
Play board games  
Speak clearly

#### Adults may . . .

Support the child's efforts to dress themselves, brush their teeth, clean up, etc.  
Provide experiences for the child to practice fine motor skills, such as cooking, painting, and playing instruments  
Provide ample materials and tools, such as art materials, puzzles, interlocking blocks, math manipulatives, scissors and tongs  
Encourage the child to practice pouring their own drink, serving themselves and using eating utensils  
Provide many opportunities for the child to have conversations, ask questions and talk about their day



## I. Physical Development and Coordination

### C. Respond to Sensory Input to Function in the Environment

1. Exhibit sensory awareness
2. Exhibit body awareness
3. Exhibit spatial awareness
4. Exhibit temporal awareness

#### An infant may . . .

Stare at faces or at their own feet and hands  
Cry or fuss when wet, soiled, tired or hungry  
Follow a slow-moving object  
Turn toward sound  
Grab an adult's nose  
Anticipate routines, such as naps and meals

#### Adults may . . .

Provide objects and images for the child to look at  
Provide objects for mouthing, batting, kicking and dropping  
Use objects and materials with different textures  
Sing or read simple rhymes  
Make animal sounds while reading books or playing with animal props  
Describe routines, using phrases such as "It's time to change your diaper."





## I. Physical Development and Coordination

### C. Respond to Sensory Input to Function in the Environment

1. Exhibit sensory awareness.
2. Exhibit body awareness.
3. Exhibit spatial awareness.
4. Exhibit temporal awareness.

#### A toddler may . . .

Show preferences for textures and foods  
Notice noises and asks questions, such as “What’s that?”  
Identify some body parts  
Move body to rhythms  
Anticipates and participates in routines

#### Adults may . . .

Provide materials with different textures, colors and shapes  
Read books and discuss pictures  
Listen for and identify sounds in the environment  
Move to music  
Establish a routine for bed, meal, nap and play times



## I. Physical Development and Coordination

### C. Respond to Sensory Input to Function in the Environment

1. Exhibit sensory awareness
2. Exhibit body awareness
3. Exhibit spatial awareness
4. Exhibit temporal awareness

#### A preschooler may . . .

Use touch, sight, smell, taste and hearing to understand world

Identify many body parts

Move through the environment without bumping into people and objects

Know there are routines and schedules they must follow, such as breakfast, school time and bed time

#### Adults may . . .

Have a sensory table or tub with items that change regularly

Play sorting games, such as sorting socks by size or color

Provide opportunities for movement

Investigate and identify sounds

Explain routines to the child asking them to help, using phrases such as “You can help get ready for school by putting on your clothes.”

Discuss events that are happening, using phrases such as “Today, you are going to grandma’s house.”



## II. Health

### A. Practice Healthy Behaviors

1. Show independence in personal care routines
2. Participate in daily physical activity
3. Exhibit body strength and endurance

#### An infant may . . .

Cry or fuss when hungry, tired or need a diaper change  
Bat at objects, kick and roll over  
Sit with help  
Crawl, cruise, walk or run  
Sit alone  
Pull to stand  
Play outside

#### Adults may . . .

Respond to the child's needs  
Establish predictable care routines  
Offer a healthy diet and new foods to try  
Provide time for daily physical activity  
When helping the child with routines, describe what they are doing, using phrases such as "We always wash our hands before we eat. Here is how we do it."



## II. Health

### A. Practice Healthy Behaviors

1. Show independence in personal care routines
2. Participate in daily physical activity
3. Exhibit body strength and endurance

#### A toddler may . . .

Show signs of readiness for toileting  
Wash their hands  
Like to take baths and splash in water  
Run, climb and ride toys with wheels  
Pull and push objects  
Climb stairs or stationary objects  
Self-soothe to relax and sleep  
Play outside

#### Adults may . . .

Show and help the child learn the steps for personal care routines, such as hand washing and toileting  
Discuss healthy food choices  
Participate in physical activities with the child, such as going for a walk or playing tag  
Provide ample time and safe space for vigorous outdoor activities, such as running, jumping and climbing



## II. Health

### A. Practice Healthy Behaviors

1. Show independence in personal care routines
2. Participate in daily physical activity
3. Exhibit body strength and endurance

#### A preschooler may . . .

Manage their toileting routine  
Wash and dry their hands  
Cover their nose and mouth when sneezing  
Play on or with gross motor equipment  
Engage in running, jumping and chasing  
Ride pedal toys  
Climb a ladder on a slide  
Climb stairs with alternating steps  
Tell an adult when they are tired or need to rest  
Play outside

#### Adults may . . .

Teach the child the steps for personal care routines, such as hand washing and toileting  
Explain why the child should eat healthy foods, drink milk and brush teeth  
Encourage vigorous physical activities, such as running, jumping and climbing



### III. Safety

#### A. Practice Safe Behaviors

1. Know and follow safety rules
2. Recognize personal danger
3. Know how and when to seek help from others

##### An infant may . . .

Cry when they need help or to communicate pain, hunger, discomfort or fear  
Respond to warnings, such as “STOP!” “NO, NO!” and “HOT!”  
Use adult as a resource or help when feeling unsafe

##### Adults may . . .

Respond quickly to the child’s cries  
Learn to differentiate the child’s types of cries  
Provide a safe environment that is free of dangers

##### A toddler may . . .

Listen to and follow directions during emergencies  
Respond to warnings  
Ask for adult support when the child feels discomfort, danger, anger or when conflicts occur  
Use adult for a resource when feeling unsafe  
Shout for help

##### Adults may . . .

Teach safe behaviors when crossing a street, climbing playground equipment or avoiding dangers such as pools, strangers and animals  
Model and practice safe behaviors with the child



### III. Safety

#### A. Practice Safe Behaviors

1. Know and follow safety rules
2. Recognize personal danger
3. Know how and when to seek help from others

##### **A preschooler may . . .**

Listen to and follow directions during emergencies  
Participate in safety drills  
Ask an adult for help  
Call for help during emergencies, such as shout for an adult or call 9-1-1  
Recognize trusted adults, such as police officers and firefighters  
Follow vehicle, street and public safety  
Sit in a car seat  
Practice bike safety

##### **Adults may . . .**

Discuss and practice safe behaviors, such as how to call for help, and where and when to cross the street  
Discuss or visit people who respond to emergencies, such as police officers, firefighters and doctors  
Be supportive when the child feels fearful or threatened  
Read books that involve safety issues  
Establish and practice emergency procedures

# EXPRESSIVE ARTS

**Expressive Arts** actively engage children's imagination through art, dance, dramatic play, theater, puppetry and music. Expressive arts offer stimulating opportunities for exploring cultural differences in music, art, ritual, holiday celebrations and family experiences. These experiences need to be planned and offered according to the skills and interests of the child. Providing stimulating and engaging experiences enhance the child's self-esteem, individuality and continuing development.



## Components:

- I. Music and Movement
  - A. Show Interest in Music and Movement
- II. Visual Arts
  - A. Show Interest in Visual Arts
- III. Drama
  - A. Show Interest in Dramatic Arts





## I. Music and Movement

### A. Show Interest in Music and Movement

1. Use body to move to music and express self
2. Use music and movement to express concepts, ideas or feelings

#### An infant may . . .

Respond to fast music by waving arms, rocking body, nodding head and kicking legs  
Respond to soft, calming music during naptime by quieting and relaxing their body movements  
Attempt to sing  
Attempt to dance to music

#### Adults may . . .

Sing to the child during simple routines, using phrases such as "This is the way we put on our socks, put on our socks." to a familiar tune  
Sing or hum their familiar songs  
Sing or play a variety of music throughout the day

#### A toddler may . . .

Pretends to move like an animal  
Sing songs  
Dance to music  
Bang on a pot to make music  
Clap to music

#### Adults may . . .

Encourage movement activities, such as walk like a duck and jump like a frog  
Provide a variety of props and materials, such as scarfs and streamers to create movements to music  
Sing to music and encourage the child to join in  
Model movement to music tempo, rhythm and mood



## I. Music and Movement

### A. Show Interest in Music and Movement

1. Use body to move to music and express self
2. Use music and movement to express concepts, ideas or feelings

#### A preschooler may . . .

Participate in movement activities, such as tag or freeze dance  
Create new dances  
Sing their favorite songs or sing-along to music  
Make up songs  
Create and play musical instruments  
Clap to a rhythm

#### Adults may . . .

Play games with the child, such as the Hokey Pokey or Limbo  
Provide musical materials, such as instruments, sheet music and play microphones  
Provide and listen to music from different cultures  
Sing nursery rhymes, finger plays and other familiar songs  
Invite caregivers and community members who play music into the classroom  
Have the child move to music in their own way  
Create patterns and rhythms using objects, such as tops of tubs or canisters



## II. Visual Arts

### A. Show Interest in Visual Arts

1. Explore and experiment with a range of media through sensory exploration
2. Use a range of materials to create pictures or three-dimensional objects
3. Use creative art to express thoughts, feelings and experiences

#### An infant may . . .

Look at, smile or coo at pictures of faces and simple designs  
Touch, point or track colorful objects  
Begin to experiment with art materials  
Use drawing tools with assistance

#### Adults may . . .

Provide objects with different shapes, colors, patterns, forms, tones, textures and size  
Allow the child the opportunity to create with art materials in their own way  
Acknowledge and validate the child's artwork

#### A toddler may . . .

Use art materials, such as paint, markers, clay and crayons  
Make random marks on paper  
Observe pictures, posters and other art work

#### Adults may . . .

Provide exposure to a variety of art through pictures, posters and books  
Model appropriate use of art materials  
Provide age-appropriate art materials, such as clay and loose parts  
Encourage the child to create art, such as sculptures  
Ask questions about the child's artwork



## II. Visual Arts

### A. Show Interest in Visual Arts

1. Explore and experiment with a range of media through sensory exploration
2. Use a range of materials to create pictures or three-dimensional objects
3. Use creative art to express thoughts, feelings and experiences

#### A preschooler may . . .

Use art materials as intended  
Create art work that represents people, places and objects  
Discuss artwork  
Look at other artwork

#### Adults may . . .

Provide exposure to a variety of art through displays, books, posters and virtual field trips to museums  
Provide a wide range of age-appropriate art materials, such as paint, paper, crayons, chalk, collage items and clay  
Allow the child to use art materials in anyway that does not cause safety concerns  
Study and discuss famous artwork  
Share artwork they enjoy and why they enjoy it  
Share book illustrations and discuss different types of illustrations



### III. Drama

#### A. Show Interest in Dramatic Arts

1. Express self through physical action and sound
2. Begin to use representation to communicate
3. Begin to pretend play
4. Use creativity and imagination to assume roles in dramatic play

##### An infant may . . .

Look at, smile or coo at faces  
Watch familiar actions and sounds  
Imitate familiar actions during play, such as rocking a baby or serving a pretend meal  
Explore with puppets

##### Adults may . . .

Talk to the child using exaggerated facial expressions  
Show the child themselves or others in mirrors and pictures  
Encourage imitation and pretend play by suggesting scenarios, such as hop like a bunny  
Provide puppets

##### A toddler may . . .

Pretend to cook, clean and care for family  
Imitate actions of people  
Use puppets  
Act out new experiences  
Pretend to be a familiar animal, such as a duck sitting on a nest

##### Adults may . . .

Provide a variety of props to support pretend play, such as baby dolls, dishes, dress-up clothes, blocks and toy cars  
Use puppets and flannel board pieces to tell stories  
Model actions and describe them, using statements such as “I am pretending to push a shopping cart”



### III. Drama

#### A. Show Interest in Dramatic Arts

1. Express self through physical action and sound
2. Begin to use representation to communicate
3. Begin to pretend play
4. Use creativity and imagination to assume roles in dramatic play

##### A preschooler may . . .

Pretend to role play various family and career roles, such as mother, father or teacher  
Act out nursery rhymes or favorite stories  
Use language to extend play, using statements such as “I am going to pick my baby up from school now.”  
Take on “roles” in play, using statements such as “I am the mommy and you are the daddy.”  
Create props for play  
Put on a “performance”  
Listen and watch an age-appropriate play or performance

##### Adults may . . .

Provide a variety of materials for pretend play, such as clothes, kitchen items and telephones  
Discuss scenarios to act out, such as taking a vacation, going to the doctor or baking a cake  
Engage in play with the child  
Read stories and books, and then encourage the child to act them out  
Make puppets out of materials, such as bags, socks, paper plates and sticks  
Take the child to watch an age-appropriate play or performance