

MATH CENTER



Explore relationships that are the foundations for early mathematics concepts using hands-on materials. Encourages choice making and independence.

Ask open-ended questions:



- “How many are there?”
- “Who has the most...?”
- “How can you find the longest...?”
- “How many ways can you...?”

What do children learn while playing?

Exploring and Describing:	Part/whole	Problem Solving
Similarities	Spatial Relationships	Measuring
Differences	1:1 Correspondence	Counting
Attributes	Making a Plan	Cooperation
Fine Motor Skills	Size and Shape	Time
Hand-Eye Coordination	Positional Attributes	Turn Taking
Creating series and patterns	Same and Different	Drawing Conclusions

Alignment to the Texas Prekindergarten Guidelines

Physical Development

- IX.A.2. Child coordinates sequence of movements to perform tasks.
- IX.B.1. Child shows control of tasks that require small-muscle strength and control.
- IX.B.2. Child shows increasing control of tasks that require eye-hand coordination.

Science

- VI.A.1. Child observes, investigates, describes and discusses properties and characteristics of common objects.
- VI.A.2. Child observes, investigates, describes and discusses position and motion of objects.
- VI.A.3. Child uses simple measuring devices to learn about objects.

Mathematics

- V.A.1. Child knows that objects, or parts of an object, can be counted.
- V.A.3. Child counts 1-10 items, with one count per item.
- V.A.6. Child demonstrates understanding that when counting, the items can be chosen in any order.
- V.A.8. Child verbally identifies, without counting, the number of objects from 1-5.
- V.B.1. Child uses concrete objects, creates pictorial models and shares a verbal word problem for adding up to 5 objects.
- V.B.2. Child uses concrete models or makes a verbal word problem for subtracting 0-5 objects from a set.
- V.B.3. Child uses informal strategies to separate up to 10 items into equal groups.
- V.C.1., V.C.2 Child names and creates shapes.
- V.C.3. Child demonstrates use of location words (such as “over,” “under,” “above,” “on,” “beside,” “next to,” “between,” “in front of,” “near,” “far,” etc.).
- V.C.4. Child slides, flips, and turns shapes to demonstrate that the shapes remain the same.
- V.D.1. Child recognizes and compares heights or lengths of people or objects.
- V.E.3. Child recognizes and creates patterns.

Social Emotional

- I.A.1 Child is aware of where own body is in space and respects personal boundaries.
- I.B.1.b. Child takes care of and manages classroom materials.
- I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.
- I.C.3. Child shows competence in initiating social interactions.
- I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal.

Language and Communication

- II.A.1. Child shows understanding by responding appropriately.
- II.A.2. Child shows understanding by following two-step oral directions and usually follows three-step directions.
- II.B.1. Child is able to use language for different purposes.
- II.B.2. Child engages in conversations in appropriate ways.
- II.B.6. Child matches language to social contexts.
- II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.

Technology

- X.A.1. Child opens and navigates through digital learning applications and programs.
- X.A.4. Child uses technology to access appropriate information.

SCIENCE CENTER

Involves the child in hands-on observation, investigation, and manipulation of materials to acquire knowledge and communicate discoveries.



Ask open-ended questions:



- “How would you describe it?”
- “What changes do you notice...?”
- “How can you found out..?”
- “What does it look/feel/smell/taste/sound like?”
- “Can you think of another way?”

What do children learn while playing?

Descriptive Skills
 Observation Skills
 Classification Skills
 Comparison Skills
 Measurement Skills
 Investigation Skills

Cause and Effect
 Vocabulary
 How Things Work
 Same and Different
 Problem Solving
 Using their Senses

Inquiry Skills
 Prediction
 Taking Turns
 Comparisons
 Categorizing
 Sorting

Alignment to the Texas Prekindergarten Guidelines

Emerging Literacy: Reading

- III.A.1 Child engages in pre-reading and reading-related activities
- III.D.2. Child uses information learned from books by describing, relating, categorizing, or comparing and contrasting.

Science

- VI.A.1. Child observes, investigates, describes, and discusses properties and characteristics of common objects.
- VI.A.2. Child observes, investigates, describes, and discusses position and motion of objects.
- VI.A.3. Child uses simple measuring devices to learn about objects.
- VI.A.4. Child observes, investigates, describes, and discusses sources of energy including light, heat, and electricity.
- VI.B.1 Child observes, investigates, describes, and discusses the characteristics of organisms.
- VI.C.1. Child observes, investigates, describes, and discusses earth materials, and their properties and uses.

Mathematics

- V.C.3. Child demonstrates use of location words (such as “over,” “under,” “above,” “on,” “beside,” “next to,” “between,” “in front of,” “near,” “far,” etc.).
- V.D.1. Child recognizes and compares heights or lengths of people or objects.
- V.D.2. Child recognizes how much can be placed within an object.
- V.D.3. Child informally recognizes and compares weights of objects or people.
- V.E.1. Child sorts objects that are the same and different into groups and uses language to describe how the groups are similar and different.
- V.E.2. Child collects data and organizes it in a graphic representation.
- V.E.3. Child recognizes and creates patterns.

Social Emotional

- I.A.4. Child shows initiative in independent situations and persists in attempting to solve problems.
- I.B.1.b. Child takes care of and manages classroom materials.
- I.B.3.b. Child remains focused on engaging group activities for up to 20 minutes at a time.
- I.C.4. Child increasingly interacts and communicates with peers to initiate pretend play scenarios that share a common plan and goal
- I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.
- I.C.6. Child demonstrates empathy and caring for others.

Language and Communication

- II.B.1. Child is able to use language for different purposes.
- II.B.3. Child provides appropriate information for various situations.
- II.D.1. Child uses a wide variety of words to label and describe people, places, things, and actions.
- II.D.5. Child increases listening vocabulary and begins to develop vocabulary of object names and common phrases.

Fine Arts

- VIII.A.1. Child uses a variety of art materials and activities for sensory experience and exploration.

WRITING CENTER



Involves the child in pre-writing activities that promote a sense of importance and confidence with written expression.

Ask questions and provide supportive comments:



“What did you write?”

“Can you read it to me?”

“Thanks for writing this down/drawing this so I can see what *you* are thinking.”

“What will happen next? I can’t wait to find out!”

What do children learn while playing?

Motor Skills

Feel Comfortable “Writing”

Spatial Relationships

Pre-Writing Concepts

Directional Concepts

Positional Concepts

Language Skills

Develop an Understanding that:

Thoughts and ideas can be represented using symbols
“Writing” can be used for many purposes, e.g. labeling, notes, lists, cards, stories

Emotions can be represented through pictures/text
Certain shaped marks mean different things

Alignment to the Texas Prekindergarten Guidelines

Physical Development

- IX.A.2. Child coordinates sequence of movements to perform tasks.
- IX.B.1. Child shows control of tasks that require small-muscle strength and control.
- IX.B.2. Child shows increasing control of tasks that require eye-hand coordination.

Emerging Literacy: Writing Domain

- IV.A.1. Child intentionally uses marks, letters, or symbols to record language and verbally shares meaning.
- IV.C.1. Child writes own name (first name or frequent nickname), using legible letters in proper sequence.
- IV.C.2 Child moves from scribbles to some letter-sound correspondence using beginning and ending sounds when writing.
- IV.C.3 Child independently uses letters to make words or parts of words.
- IV. C 4. Child uses appropriate directionality when writing (top to bottom, left to right).
- IV.C.5. Child begins to experiment with punctuation when writing.

Mathematics

- V.A.9. Child recognizes one-digit numerals, 0-9.
- V.E.2. Child collects data and organizes it in a graphic representation.
- V.E.3. Child recognizes and creates patterns.

Social Emotional

- I.B.1.b. Child takes care of and manages classroom materials.
- 1.C.2. Child assumes various roles and responsibilities as part of a classroom community.
- I.C.5. Child initiates problem-solving strategies and seeks adult help when necessary.

Emerging Literacy: Reading Domain

- III.A.1. Child engages in pre-reading and reading related activities.
- III.B.8. Child blends onset (initial consonant or consonants) and rime (vowel to end) to form a familiar one-syllable word with and without pictorial support.
- III.C.1. Child names at least 20 upper and at least 20 lower case letters in the language of instruction.
- III.D.1. Child retells or reenacts a story after it is read aloud.

Fine Arts

- VIII.A.1. Child uses a variety of art materials and activities for sensory experience and exploration.
- VIII.A.2. Child uses art as a form of creative self-expression and representation.

MANIPULATIVES

Encourages choice making, independence, toy manipulation, and sharing.



Ask open-ended questions:



“What can you do with that?”

“What do you think would happen if...?”

“Is there another way to...?”

“What should happen next?”

What do children learn while playing?

Concept Development

Fine Motor Skills

Sensory Integration

Hand-Eye Coordination

Spatial Relationships

Strengthening Arms and Hands

Imagination

1:1 Correspondence

Making a Plan

Size and Shape

Positional Attributes

Same and Different

Problem Solving

Making Models

Counting

Cooperation

Turn Taking

Patterning

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Fine Arts

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- III.A.3. Child demonstrates interest in and shows appreciation for the creative work of others.