

Exploring Natural Materials and Tools

Children will investigate natural materials such as sticks, rocks, and leaves while using simple tools to touch, move, and examine them.

STEM Focus: Technology & Tools

Experiences Your Children Will Have

- Learning how tools can help us explore and discover
- Noticing textures, shapes, and differences in natural materials

Vocabulary

- Tool(s): Something we use to help us do a job
- Natural: Something that comes from the earth
- Texture: How something feels when you touch it

Materials

- Simple tools (magnifying glass, tweezers, tongs, spoons, small hammer, etc.)
- Natural materials (sticks, rocks, pinecones, shells, flowers, etc.)

Beginning

- Tell your child, Today we are going to explore natural items using tools!
- Show a few natural items and tools and describe what they are.
- Make a connection. You might say, *We see some of these things outside in our backyard or in the park. I wonder how we can use these tools to explore them?*
- *Invite your child to begin exploring.*

Middle

- Encourage your child to touch, explore, and use tools with the materials.
- Use the materials alongside your child and imitate how they use them. Narrate what they are doing. You might say, *You are using the tool to pick it up!*
- Use the vocabulary words intentionally while interacting with your child.
- Use specific strategies below, depending on your child's age:
 - Infants and toddlers may explore the materials by mouthing, touching, holding, and tapping. You can support your child by describing their actions: *This pinecone feels bumpy; You are tapping the stick.*
 - Preschoolers may use tools to explore, pick up, or break apart materials. You

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can support your child by modeling and asking questions: *What do you notice?; How did you use that tool?*

- School-age children may investigate more closely and use tools with purpose. You can support your child by encouraging deeper thinking: *What do you think is inside?; How are the materials similar or different?*

End

- As you notice your child begin to lose interest, give them a warning that you are going to put the materials away. You might say, *In a few moments we are going to clean up. You can try out one more idea with your materials.*
- Encourage your child to help you clean up the materials and put them away together.

Additional Learning

- Use other types of tools with natural materials (collect rain in containers; use a ruler or yardstick to measure plants or flowers).
- Visit your local library to find books about different types of tools. They may even have tools (microscope, construction tools, musical instruments) that can be checked out!