

EARLY SCIENCE INITIATIVE

Make Science Relevant to Children's Lives

Observe children as they play and explore. What are they interested in? What questions do they have? What do they enjoy doing? All of these interests are rooted in science.



Are they interested in building?

That's Engineering!



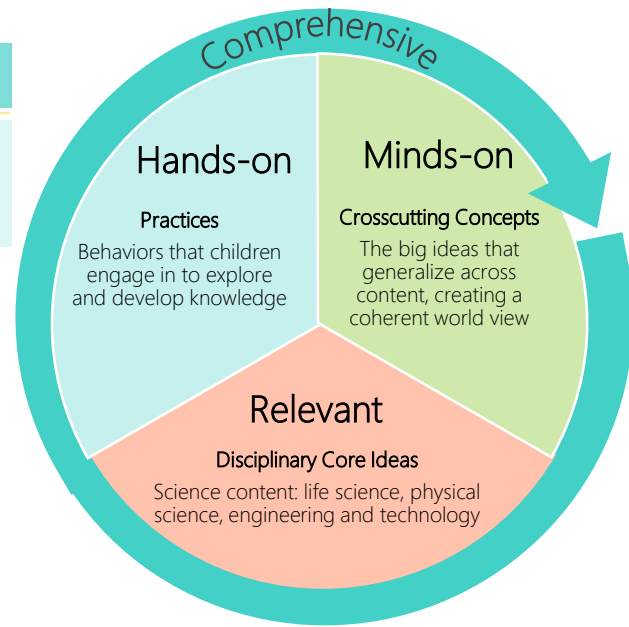
Are they interested in bugs?

That's Life science!



Do they notice the rain?

That's Earth & Space Science!



Make Science Hands-On

Encourage children to engage in scientific practices by modeling practices, providing children guided opportunities to engage in practices, and labeling scientific practices for children when they engage in them!

- **Observing and Describing:** "What do you notice about the ...?"
- **Asking Questions:** "I wonder..."
- **Making Predictions:** "What do you predict will happen if we...?"
- **Investigating:** "Let's test it out and see what happens..."
- **Documenting, Interpreting and Analyzing Data:** "Let's document what is happening while we test..."
- **Constructing Explanations:** "Why do you think ...?"

Make Science Minds-On

Help children think about crosscutting concepts as they engage in practices! Label concepts as you talk and play with children.

1

Patterns

"It's a pattern, look how it repeats!"

2

Stability and Change

"It changed! It was ___ and now it's ___"

3

Cause and Effect

"___ caused ___"

Make Science Comprehensive

When exploring hands-on with children, practice skills and support development across domains.

- **Language Development:** children build vocabulary as they explore hands-on and communicate what they are investigating with others.
- **Early Math:** children engage in sorting, identifying patterns, counting, measuring, identifying shapes, and a variety of other early math skills while engaging in science.
- **Literacy:** Children gain interest in books to learn more about the topics that interest them.
- **Social and Emotional learning:** When children engage in science, they employ a variety of executive functions and learn to work collaboratively.
- **Connecting home and school:** Because science is everywhere, it is a great way to connect with families. Share with families the science you are engaging in with children in the classroom, help families see what science they are already doing at home, and invite them to bring materials into the classroom for children to explore and investigate that are culturally and contextually relevant.