



Early Childhood STEM Week 2026



DAY 4 – STEM IN THE FAMILY (March 26) INFANT & TODDLER ACTIVITIES



1. Everyday Family Objects

Age: Infants & Young Toddlers

Description / Instructions:

Provide familiar household objects (spoons, cups, small bowls) for children to explore. Adults narrate the child's actions and demonstrate how objects are used in family routines.

Materials:

- Spoons
- Cups
- Small bowls

Recommended Setting:

Floor or cozy play area

Advanced Vocabulary:

- Spoon
- Cup
- Bowl
- Use

Extended Activities:

- Rotate objects weekly
- Encourage imitation of adult actions

Make It Easier:

- Present one object at a time

Make It More Advanced:

- Combine two objects for a pretend activity

DRDP 2025 Measures Targeted:

- **ATL 1:** Engagement, Attention, and Persistence
- **ATL 2:** Curiosity, Interest, and Initiative

2. Nesting and Stacking Containers

Age: Toddlers

Description / Instructions:

Children explore stacking, nesting, and filling containers at home. Adults encourage comparison and talk about size and quantity.

Materials:

- Small boxes
- Plastic containers
- Cups

Recommended Setting:

Table or floor play area

Advanced Vocabulary:

- Big
- Small
- Full
- Empty

Extended Activities:

- Add lids
- Compare capacities

Make It Easier:

- Use one set of containers

Make It More Advanced:

- Ask children which container holds more

DRDP 2025 Measures Targeted:

- **SCI 1:** Cause and Effect
- **PD 4:** Fine Motor Manipulative Skills
- **ATL 1:** Engagement, Attention, and Persistence

3. Rolling Household Objects

Age: Toddlers

Description / Instructions:

Children roll safe household objects (e.g., balls, cans, tubes) and observe their movement. Adults narrate speed, distance, and direction.

Materials:

- Ball
- Empty paper towel tube
- Small can

Recommended Setting:

Open floor space

Advanced Vocabulary:

- Roll
- Fast
- Slow
- Stop

Extended Activities:

- Add ramps
- Roll toward targets

Make It Easier:

- Roll with adult support

Make It More Advanced:

- Compare the speed or distance of different objects

DRDP 2025 Measures Targeted:

- **SCI 1:** Cause and Effect
- **PD 3:** Gross Motor Manipulative Skills
- **SED 2:** Social Awareness

PRESCHOOL ACTIVITIES



4. Family Recipe Science

Age: Preschool

*Created by Maria Teresa Ruiz, STANCOE
Used with permission for EC STEM Week 2026*

Description / Instructions:

Children follow a simple recipe to mix ingredients. Adults support measuring, pouring, and observing changes (e.g., flour + water).

Materials:

- Dry ingredients (rice, flour, oats)
- Measuring cups
- Bowls
- Spoons

Recommended Setting:

Table or dramatic play kitchen

Advanced Vocabulary:

- Measure
- Mix
- Ingredient
- Full

Extended Activities:

- Sequence steps with picture cards
- Compare quantities

Open-Ended Questions:

- What happens when we mix these?
- How much do you think we need?

Make It Easier:

- Pre-measure ingredients

Make It More Advanced:

- Introduce fractions

DRDP 2025 Measures Targeted:

- **MATH 5:** Measurement
- **ATL 2:** Curiosity, Interest, and Initiative
- **FLD 2:** Using Language (Expressive)

5. Sorting Laundry

Age: Preschool

Description / Instructions:

Children sort laundry or fabric pieces by color, size, or type, and count items in each group.

Materials:

- Socks or fabric squares
- Baskets

Recommended Setting:

Dramatic play or sensory area

Advanced Vocabulary:

- Sort
- Count
- Same
- Different

Extended Activities:

- Graph sorted items
- Pair matching socks

Open-Ended Questions:

- How did you decide to sort?
- What do you notice about the groups?

Make It Easier:

- Sort by one attribute

Make It More Advanced:

- Sort by two attributes

DRDP 2025 Measures Targeted:

- **MATH 2:** Classification
- **MATH 5:** Measurement
- **FLD 3:** Shared Communication and Conversation

6. Family Tools Exploration

Age: Preschool

Description / Instructions:

Children explore safe household tools, discuss how they work, and identify their function in family life.

Materials:

Measuring tape

Whisk

Toy screwdriver

Recommended Setting:

STEM or discovery area

Advanced Vocabulary:

- Tool
- Function
- Build
- Fix

Extended Activities:

- Match tools to household tasks
- Draw tools in use

Open-Ended Questions:

- What does this tool help us do?
- How does it make the job easier?

Make It Easier:

- Explore one tool at a time

Make It More Advanced:

- Compare two tools with similar functions

DRDP 2025 Measures Targeted:

ATL 2: Curiosity, Interest, and Initiative

ATL 3: Problem-Solving

ATL 4: Planning

7. Home Structures

Age: Preschool

Description / Instructions:

Children build homes or rooms using boxes and loose parts, testing stability and design.

Materials:

- Cardboard boxes
- Tape
- Blocks

Recommended Setting:

Construction area

Advanced Vocabulary:

- Structure
- Stable
- Support
- Strong

Extended Activities:

- Test with small weights
- Redesign structures

Open-Ended Questions:

- What makes your structure strong?
- What could you change?

Make It Easier:

- Use pre-cut boxes

Make It More Advanced:

- Add height or weight constraints

DRDP 2025 Measures Targeted:

- **ATL 2:** Curiosity, Interest, and Initiative
- **ATL 3:** Problem-Solving
- **ATL 4:** Planning

8. Transportation at Home

Age: Preschool

Description / Instructions:

Children explore family transportation, build models of vehicles, and compare them.

Materials:

- Toy vehicles
- Blocks
- Paper

Recommended Setting:

Block or dramatic play area

Advanced Vocabulary:

- Transport
- Travel
- Vehicle

Extended Activities:

- Create road maps
- Compare wheel vs. no-wheel vehicles

Open-Ended Questions:

- How does your family travel?
- Why do we use different vehicles?

Make It Easier:

- Use familiar vehicles

Make It More Advanced:

- Design a new vehicle

DRDP 2025 Measures Targeted:

- **ATL 2:** Curiosity, Interest, and Initiative
- **ATL 3:** Problem-Solving
- **ATL 4:** Planning

9. Energy and Water at Home

Age: Preschool

Description / Instructions:

Children explore how energy is used at home through light and water activities.

Materials:

Flashlights

Faucet or water toys

Recommended Setting:

Science or sensory area

Advanced Vocabulary:

- Energy
- On
- Off
- Save

Extended Activities:

- Discuss conserving energy
- Track usage

Open-Ended Questions:

- What happens when we turn this on?
- How can we save energy?

Make It Easier:

- Focus on turning on/off

Make It More Advanced:

- Compare energy sources

DRDP 2025 Measures Targeted:

- **FLD 3:** Shared Communication and Conversation
- **ATL 3:** Problem-Solving
- **ATL 4:** Planning

10. Family STEM Story Share

Age: Preschool

Description / Instructions:

Children share stories about STEM in their family routines or problem-solving at home.

Materials:

- Paper
- Crayons

Recommended Setting:

Circle time

Advanced Vocabulary:

- Problem
- Solution
- Explain

Extended Activities:

- Create a class book of family STEM stories

Open-Ended Questions:

- How did your family solve this problem?

Make It Easier:

- Adult prompts

Make It More Advanced:

- Encourage peer questions

DRDP 2025 Measures Targeted:

- **FLD 5:** Alphabetics and Print Knowledge
- **FLD 6:** Writing
- **SED 2:** Social Awareness