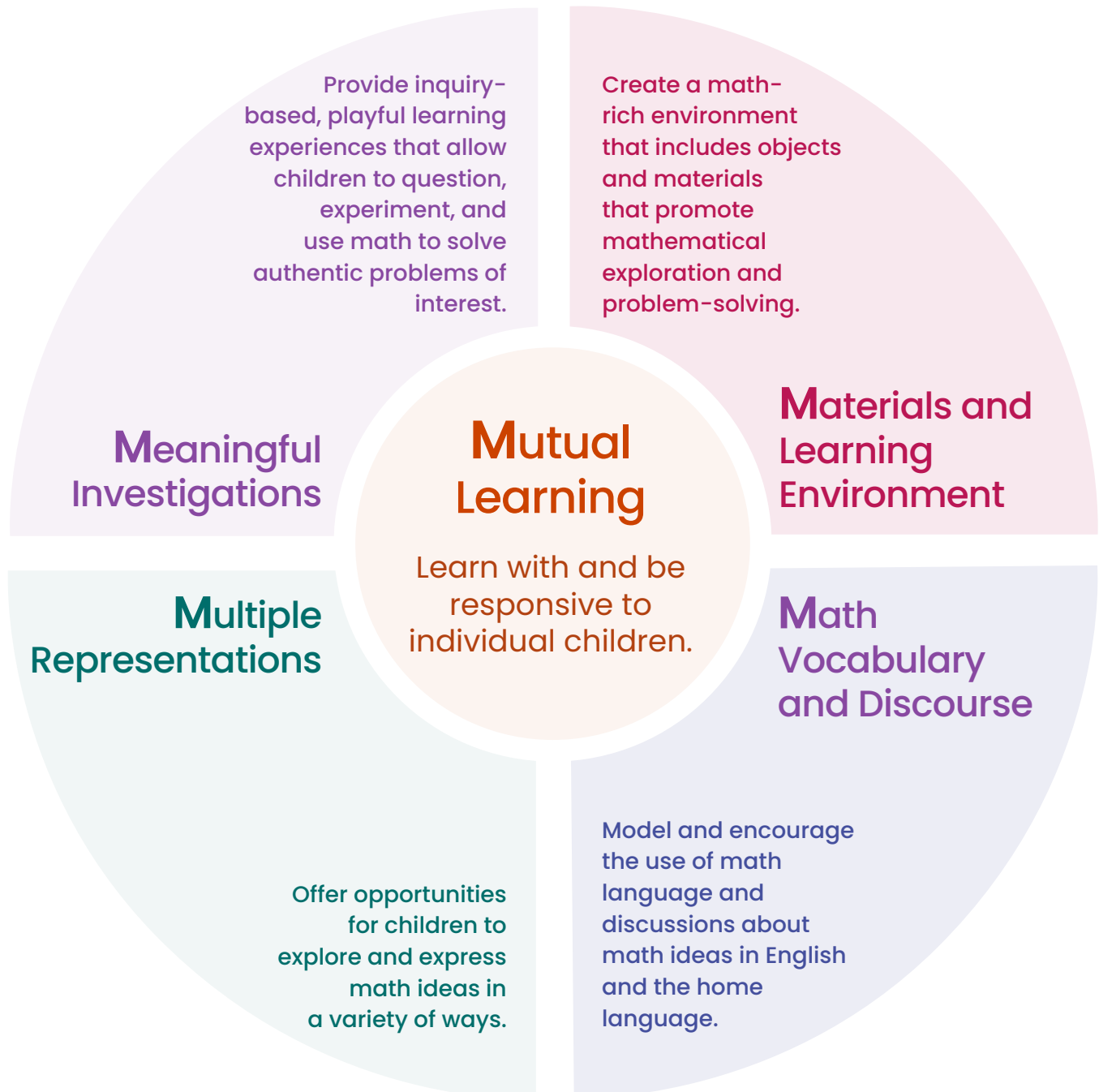


M⁵ Early Math Approach Overview

The M⁵ Early Math Approach is a comprehensive, research-based approach to early math learning from birth through eight years of age. The approach promotes a math-rich environment and meaningful investigations that are responsive to individual learners' interests, strengths, and needs. The M⁵ Early Math Approach was adapted with permission from WestEd.



Mutual Learning

Learn with and be responsive to individual children.

- Observe carefully during interactions to learn about children's development, emerging math skills and knowledge, interests, and experiences.
- Partner with families to learn about children's home lives and cultures.
- Use what you learn about children to build on individual children's strengths, needs, interests, languages, and cultures.
- Integrate children's interests, home languages, and cultures into the environment, daily routines, and activities to ensure that learning experiences are relevant and meaningful to children.



Meaningful Investigations

Provide inquiry-based, playful learning experiences that allow children to question, experiment, and use math to solve authentic problems of interest.

- Nurture children's inquiry and exploration of math ideas during everyday routines and play.
 - Provide hands-on experiences that allow children to create, problem-solve, and represent math ideas.
 - Offer open-ended investigations that have more than one solution or process.
- Ask questions that encourage children to reflect on their solutions and problem-solving strategies. For example, you might ask, "How do you know...?" or "Can you show me how you...?"

Materials and Learning Environment

Create a math-rich environment that includes objects and materials that promote mathematical exploration and problem solving.

- Integrate math materials throughout the learning environment to promote meaningful math learning during play, daily routines, in various content areas, and within learning centers.
- Provide access to open-ended materials varying in size, shape, or quantity to allow children to explore math ideas.
- Include books, in English and in children's home languages, that highlight math concepts.



Math Vocabulary and Discourse

Model and encourage the use of math language and discussions about math ideas in English and children's home language.

- Promote the use of math language throughout the day.
- Offer open-ended questions and prompts that invite children to discuss their mathematical ideas and explain their thinking, in English or their home language.
- Pair math language with gestures, visuals, and concrete objects.



Multiple Representations

Offer opportunities for children to explore and express math ideas in various ways.

- Provide access to a variety of materials that allow children to choose how they represent their math ideas and solve math-related problems.
- Offer children opportunities to represent their understandings in multiple ways. For example, they might use concrete objects, words, drawings, gestures, movements, or symbols.
- Observe and notice the unique ways children show their understanding, and individualize learning experiences based on children's preferences.

