Why Early Math?

- Early math is a strong predictor for later school success.
  - Into high school
  - Later reading skills
  - Oral language
  - Vocabulary

- Mathematics is foundational and achievable for young children.
What Is Appropriate Content?

- Number and Relationships
  - Counting
  - Comparing
  - Composition/Decomposition of Numbers
  - Data Relationships
  - Measurement

- Geometry and Spatial Relationships
  - Thinking and reasoning
What Do Teachers Need to Know?

- How children learn math – learning paths and/or trajectories
- Math Content – Expanded
- Connection to Standards
- How to teach math to young children
How Do You Intentionally Teach Math?

- Provide opportunities for exploration, thinking, and meaningful connecting to other skills.

- Implement a planned, sequenced curriculum that uses learning paths.

- Integrated with “intellectual integrity”

- Appropriately connected to physical and emotional development
How Do You Assess Mathematical Understanding?

Math Talk
What Can Be Done to Increase Quality Mathematics?

- All early childhood programs should provide high-quality mathematics curricula and instruction.

- States should develop or revise their early childhood learning standards or guidelines to reflect teaching-learning paths.

- Professional development (both inservice and preservice) for teachers should involve a) an understanding of mathematics, b) crucial teaching-learning paths, c) principles of intentional teaching and curriculum, and d) how to implement a curriculum.
“You always have lots of problems teacher! Come by any time and we will help!”