

BUILDING A MATHEMATICIAN'S IDENTITY IN THE EARLY YEARS

COACHING FOR SUCCESS

The language we use is very important. Try coaching mathematicians by:

- modeling positive self-talk
- modeling real-world use of math
- setting up a weekly math games night
- supporting and coaching your learner through the activity instead of doing the work for them
- use prompting questions to extend their thinking
- honor mistakes by noticing the parts they do know
"Oh, I see what you are thinking..."



Area of Learning: MATHEMATICS

**DEVELOP, DEMONSTRATE, AND APPLY MATHEMATICAL UNDERSTANDING
THROUGH PLAY, INQUIRY, AND PROBLEM SOLVING**

HABITS

Habits to promote reading at home:

- creating a special spot at home to practice math and play games (board games, Lego, or a barrier game)
- singing number songs
- drawing pictures or reading books about numbers
- playing with pretend money

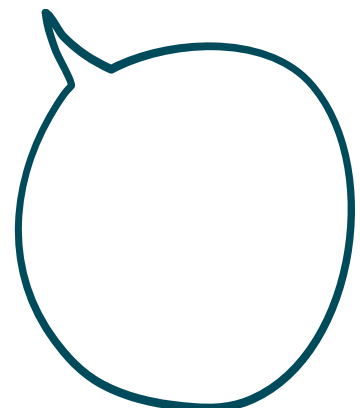
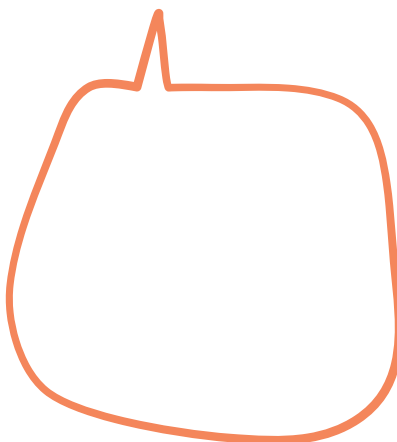
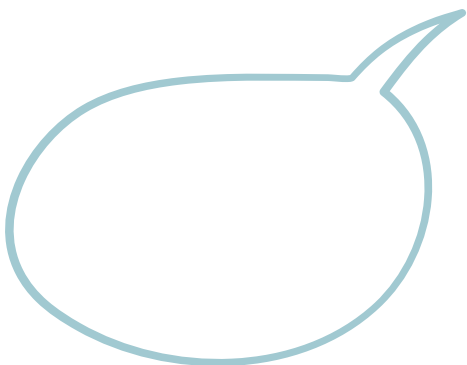
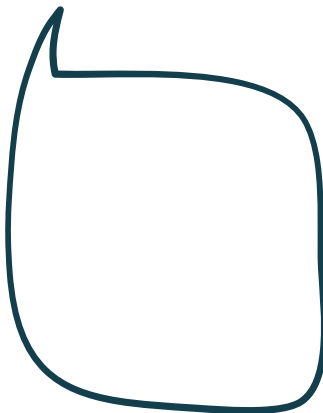
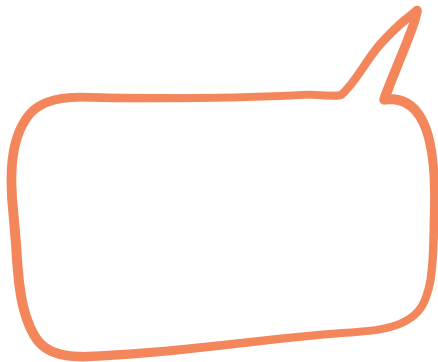


Using Positive Self-Talk When I'm Learning Something New

Directions: Reflect on your strengths, qualities, and accomplishments in working with numbers. Be honest and kind to yourself as you write these reflections. By recognizing your value, you can build confidence and resilience. You are awesome, and you matter! Have fun and enjoy the process.

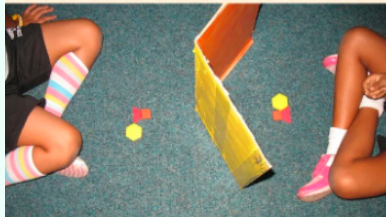


***I am good at
math because I
can...***



BARRIER GAME

Focus Concept(s):
• **Language Matters**



This game helps students begin to 'talk like mathematicians' by:

- Using positional words, like 'beside the cube on your left..' and 'under', and
- Using ordinal numbers, like 'first' and 'third'.

INSTRUCTIONS:

Sit across from each other at a table with a barrier between you. Barriers can be a cereal box, an open book, or a box. Ensure that communication is entirely verbal.

Partner A creates a structure with a few linking cubes, (lego, bread ties, small rocks, cheerios, or milk jug lids work). The child (Partner B) tries to create the same structure or pattern by listening to Partner A's instructions. Partner B may ask clarifying questions during the process.

After three or four minutes, Partner A reveals the structure or pattern to Partner B, and both participants reflect on the success of the activity. A conversation may include:

"I missed the direction words. I needed to listen more carefully to your left and right instructions." I should have asked if it was lying down or standing up."

Reverse roles and repeat the game.

MATH TWISTER

On a traditional twister game (or make a game board using paper plates or a large piece of paper), add number labels such as 3, 4, 5, and 6. Then, instead of saying “right hand on blue,” read out equations such as “right hand on $6 - 3$ ” or “left hand on $2 + 4$ ”. Then, watch the fun and twisting begin!

