

Math/Numbers



Creating an Engaging Interest Center

What Children Are Learning

- **Geometry**
 - Shapes
 - Spatial Relationships
- **Problem Solving**
- **Patterns**
- **Changes**
 - Adding
 - Subtracting
- **Collecting Information**
- **Measurements**
- **Attributes**
 - Matching
 - Sorting
 - Comparing
 - Classifying Groups
- **Organizing Information**
- **Number Concepts**
 - Counting
 - Comparison
 - Sequence



Developmental Skills Typically Acquired

Toddler Skills

- Memorized counting
- Differences/similarities and matching items
- Complete tasks that involve size and shape; may need assistance

Preschool Skills

- One-to-one counting
- Sort, compare and classify by attributes
- Identify and name common 2-D and 3-D shapes

School-Age Skills

- Count by 2s, 5s, 10s
- Understand the concept of time
- Create, extend and tell the rule of simple and complex patterns

NOTE: This is not an exhaustive list, and children will develop according to their own individual timelines.

Materials and Storage

Nesting or Stacking
Cups/Toys



Wooden Peg Puzzles



Picture Books of
Favorite Songs, Finger
Plays, Rhymes



Shape Blocks



Shape Sorters



Various Collections to
Sort, Count, Graph, or
Create Patterns



Pattern and
Interlocking Blocks



Pathway Board Games



Various Measuring
Tools with Suggestions
for Items to Measure



Magnetic
Numbers/Letters



Puzzles of Various
Levels



Card Games
(Go Fish, Uno)



Cash Register with Play
Money



Estimation Jars



Clocks, Calendars,
Number Lines, and
Charts



Developmentally Appropriate Practice (DAP) for Age Groups

T Toddlers	PS Preschoolers	SA School-Agers
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Storage



Make cleanup a game, store items at their level, with a label and picture on the tubs and baskets, and another on the shelf.

Contact the OECOSL Child Care Support Line at 1.800.299.1627 for assistance.



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Creating an Engaging Interest Center

Best Practices

Rotate materials that offer various experiences and challenges that represent the interests of the children and families in your program.

Use math talk throughout the day.

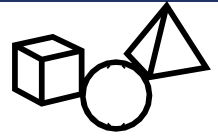
Locate this center away from noisy areas, such as music and movement.

Encompass math concepts in daily routines and practices, both intentionally and spontaneously.

Model questioning and wondering about math concepts out loud with children.

Ask meaningful, open-ended questions to build deeper thinking skills.

Play alongside children and incorporate their interests into math play.



HINT

Remember these practices with the first letter of each action word: **RULE MAP**.

Activities and Project Ideas

Creating Charts and Graphs

- Sort items such as shoes, blocks, balls, baby dolls, or hats.
- Graph weather, attendance, pets, nature items, or favorite things by attributes.
- Create a large 5-by-5 square grid using a plain shower curtain liner and tape or markers to conduct sorting and graphing activities.

Incorporating Surveys and Recording Sheets

- Question peers about favorite foods, colors, and thoughts.
- Ask peers which common items they think weigh more or less than others.
- Report the results in developmentally appropriate ways.

Create a Feely Box

- Place various shaped items inside a small box with holes on opposite ends and have children use both hands to feel the items.
- Describe and name each shape without looking.

Taking Walks

- Scavenger hunt for shapes, numbers of items, or materials that measure a certain length.

Exploring Food and Cooking

- Measure ingredients.
- Group foods based on various attributes.

Family Engagement

Encourage family engagement by suggesting they include math as part of regular routines and experiences, such as:

- Questioning and wondering about math concepts.
- Including favorite math related activities.
- Playing math games.
- Providing positive phrases of support such as:
 - Let's figure this out together.
 - Yes, math can be challenging, but I'm confident you can do it.
- Using measurement and counting as part of food preparation.
- Sharing simple/favorite recipes and photos for a class recipe book.



ADDITIONAL RESOURCES

- Making Math Meaningful for Young Children**
<https://www.naeyc.org/resources/pubs/tyc/oct2014/making-math-meaningful>
- Math Talk with Infants and Toddlers**
<https://www.naeyc.org/our-work/families/math-talk-infants-and-toddlers>
- Town Square: Children are Born Mathematicians** (Online Training accessible on ILP)
- Town Square: Exploring Math with Preschoolers** (Online Training accessible on ILP)

