### Number Sense

#### 36 to 60 months

**Some Indicators for Children:**
- Names some numerals
- Recognizes that a single object is “one” regardless of size, shape, or other attributes
- Understands that numbers represent quantity
- Applies numbers and counting concepts to daily life
- Differentiates some letters from numerals
- Recognizes, names, and writes some numerals
- Counts to at least 20 from memory
- Counts at least 10 objects in one-to-one correspondence, without assistance
- Uses numbers to predict and make realistic guesses
- Tells what number comes before or after a given number up to 10

#### 60 months to Kindergarten Entry

**Some Indicators for Children:**
- Counts to at least 31 from memory
- Understands that the last number counted represents the total quantity of objects
- Uses math manipulatives, games, toys, and coins in daily activities
- Uses basic numbers and counting operations
- Tells what number comes before or after a given number to 20, with assistance

#### Kindergarten Standards

- Rote count by ones forward from 1 to 100 and backward from any number in the range of 10 to 1
- Read aloud numerals from 1 to 31
- Fluently compose and decompose numbers to 5
- Order numerals from 1 to 10
- Count objects in a set of up to 20, and count out a specific number of up to 20 objects from a larger set
- Compare two sets of up to 10 objects each and say whether the number of objects in one set is equal to, greater than, or less than the number of objects in the other set
- Locate numbers from 1 to 31 on the number line
- Describe a number from 1 to 9 using 5 as a benchmark number

### Some Strategies for Caregivers:

- Estimate how many objects you have or will see and then count out loud.
- Pose math questions to child that apply to daily life
- Model writing simple math equations
- Provide opportunities for child to use numbers and counting

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Early Learning & Development Benchmarks  
Washington State Kindergarten Mathematics Standards  
Jeanette Grisham  
NWESD Math Coordinator
### Cognition and General Knowledge: Mathematics and Numeracy

#### Early Learning & Development Benchmarks

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<thead>
<tr>
<th>Age Range</th>
<th>Some indicators for Children</th>
<th>Some Strategies for Caregivers</th>
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<tbody>
<tr>
<td>36 to 60 months</td>
<td>• Uses activities that explore and develop vocabulary for length and weight&lt;br&gt;• Uses measuring tools in play activities&lt;br&gt;• Estimates size&lt;br&gt;• Labels objects using size words</td>
<td>• Engage child in measuring tasks&lt;br&gt;• Model use of conventional measuring tools and methods in everyday situations&lt;br&gt;• Demonstrate, explain, and engage child in activities that use non-standard measurement and common measuring tools&lt;br&gt;• Playing measuring games with child</td>
</tr>
<tr>
<td>60 months to Kindergarten Entry</td>
<td>• Measures sand or water using a variety of containers&lt;br&gt;• Measures ingredients for a cooking project, with guidance&lt;br&gt;• Uses some conventional vocabulary of measurement, though may not have exact understanding of meaning&lt;br&gt;• Estimates how many steps it will take to walk across the room&lt;br&gt;• Matches objects correctly</td>
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#### Kindergarten Standards

- Make direct comparisons using measurable attributes such as length, weight, and capacity
## Properties of Ordering: Geometry

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<th>Kindergarten Standards</th>
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<tbody>
<tr>
<td><strong>Some Indicators for Children</strong></td>
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<td>- Sort shapes using a sorting rule and explain the sorting rule</td>
</tr>
<tr>
<td>- Identifies &amp; labels different kids of 2-dimensional shapes</td>
<td>- Describes familiar geometric and non-geometric shapes in environment, with assistance</td>
<td>- Identify, name and describe circles, triangles, rectangles, squares (as special rectangles), cubes and spheres</td>
</tr>
<tr>
<td>- Compares shape and size of objects</td>
<td>- Puts together and takes apart shapes to make other shapes</td>
<td>- Describe the location of one object relative to another object using words such as <em>in, out, over, under, above, below, between, next to, behind, and in front of</em></td>
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<tr>
<td>- Creates, builds, or draws shapes</td>
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<tr>
<td>- Recognizes non-geometrical shapes in nature</td>
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<tr>
<td>- Orders shapes from smallest to largest</td>
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</tbody>
</table>

### Some Strategies for Caregivers:

- Use accurate words to promote child’s understanding of shapes
- Provide opportunities for child to recognize shapes in the environment
- Provide materials that can be connected and combined to create new shapes
- Take child to observe murals or other community artwork, exploring together the variety of shapes used.
- Provide some opportunities for child to create art projects that use shapes
- Play games that challenge child to describe and identify shapes
- Provide materials in shapes that can be used to represent or recreate murals or other art forms in the community
### Cognition and General Knowledge: Mathematics and Numeracy

#### Properties of Ordering: Algebra

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<td><strong>Some Indicators for Children</strong></td>
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<td><strong>Some Strategies for Caregivers:</strong></td>
</tr>
<tr>
<td>- Orders several objects on the basis of one characteristic through trial and error</td>
<td>- Sorts objects into categories, classifying and comparing according to a characteristic</td>
<td>- Demonstrate and explain examples of patterns for child to create and recreate</td>
</tr>
<tr>
<td>- Creates own patterns with a variety of materials</td>
<td>- Completes a given pattern</td>
<td>- Provide opportunities for child to look for patterns in the house, classroom, or nature</td>
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<td>- Classifies everyday objects that go together</td>
<td>- Creates and describes a simple pattern</td>
<td>- Play classification games with child</td>
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<tr>
<td></td>
<td>- Describes how and why objects are arranged or sorted the way they are</td>
<td>- Provide opportunities for child to create own patterns</td>
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</table>

Working with patterns helps children strengthen their understanding of addition and subtraction and moves them toward algebraic thinking. These are the Operation Standards for Kindergarten:

- Model addition by joining sets of objects that have 10 or fewer total objects when joined and model subtraction by separating a set of 10 or fewer objects
- Describe a situation that involves the actions of joining (addition) or separating (subtraction) using words, pictures, objects or numbers

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Some Strategies for Caregivers:

- Demonstrate and explain examples of patterns for child to create and recreate
- Provide opportunities for child to look for patterns in the house, classroom, or nature
- Play classification games with child
- Provide opportunities for child to create own patterns
- Provide opportunities for child to arrange collections into groupings using different rules that you make up together