

MATERIALS GUIDE: ITERS-3 AND ECERS-3



MATERIALS GUIDE



This resource should be used in conjunction with ECERS-3 and ITERS-3 scale books, GA and ERSI Additional Notes, and All About the ECERS-3. This document will give a generalized overview of the kinds of materials needed in the Activities subscales of the ERS scales but will not give specific amounts of items that are needed. Additionally, the materials listed in this guide are not an exhaustive list of all materials that can be used. Please reference each item in the scale book to determine how many materials are needed given the scale used in your classroom and based on the ages and abilities of children that are enrolled.

Helpful Tips to Keep in Mind:

- As materials are rotated for variety or for sanitizing, note the types of materials you are removing and add another material of the same type back into rotation. For example, if you take an interlocking material out, replace it with another interlocking material. This helps to ensure all kinds of materials are still represented.
- For mixed age classrooms, ensure materials for all ages and abilities are present for use. Keep in mind the ages of children in the class, how those ages change throughout the year, and the age ranges listed in the scale book.
- Material selection will need to change as children progress in age and abilities throughout the year. For example, when choosing materials for a toddler classroom, it may be necessary to include a few materials from infant categories at the beginning of the year but add in more preschool materials by the end of the year.

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BOOKS



Teachers have an important role to play in preparing children for life-long literacy, both by making books accessible to children and by sharing the joy of reading with them.

When teachers encourage children to use books and model excitement in reading, children will learn to love books. Children can acquire pre-literacy skills by learning to identify letters and sounds, following a story, hearing new vocabulary, and recognizing print.




Infants and toddlers will learn new sounds and words, while **preschoolers** will learn inflection, storytelling, and new concepts like math or science.

*Books can be store bought or teacher made, using laminated pictures of the children for example.

Books should:

- Be organized in a way that allows all children in the class to easily access them.
- Be suited to the age and developmental levels of the children.
- Contain positive social messages. Not contain graphic or violent images.



	<p align="center">Infants (Birth-12 months)</p>	<p align="center">Toddlers / Twos (12 months-3 years)</p>	<p align="center">Preschool (3 years - 5 years)</p>
<p>Books</p> <p>A book area should include both fictional and factual story books. Factual books should not only teach a concept but also include photos of real people, animals, nature, or places.</p>	 <p>Plastic books</p> <p>Cloth books</p> <p>Board books</p>	 <p>Accessible book storage</p>	 <p>Board books and picture books</p>
<p>Appropriate topics per age group:</p>	<p>Wide selection of books with varied topics such as: picture books and stories about people of different races, ages, and differing abilities; pets, farm and zoo animals; familiar objects used at home and in the childcare environment; familiar routines, such as eating, sleeping, and toileting; and nature/science.</p>		<p>Wide selection of books with varied topics such as: people, feelings, nature/science, math, cultures, varying race, males and females, jobs/work, health or self-help skills, sports/hobbies, or abilities.</p>

Homemade Ideas:

Loose-leaf Book Rings



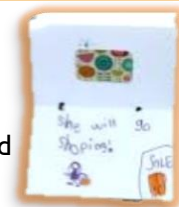
Stapled, covered with tape



Ribbon or yarn



Child-created



Zip-loc bags



FINE MOTOR MATERIALS

Fine motor materials allow children to tone and develop their smaller muscle groups, which will help them as they learn to write and perform self-help skills such as zipping and buttoning. When varied categories of fine motor materials are accessible to children, they provide opportunities for developing a wider variety of skills as they grow. Fine motor materials include the following: **interlocking materials, *art (ECERS-3 only), manipulatives, and puzzles.**

Individual ages and abilities should always be considered when choosing appropriate materials. Additionally, when using materials with small pieces or art materials, check for size and potential choking hazards before use with young children.








*Although art materials are considered in their own item, they are also considered fine motor materials in the ECERS-3 scale. Please see the art materials section for more ideas.

















Did you know?

- Some materials can count in more than one category. For example, interlocking materials can also be considered a manipulative. When this happens, the materials will be counted in the category where needed but can only be counted once.
- Some materials may work for more than one age group. For example, Mr. Potato Head may be appropriate for both older toddlers and preschoolers.

FINE MOTOR MATERIALS

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)	
<p>Interlocking Materials</p> <p>Interlocking materials are objects that are meant to fit together, such as Legos, pop beads, or Lincoln logs.</p>	 <p>Large Pop Beads</p> <p>Links</p>	<p>Assorted interlocking</p>  <p>Duplos</p>	<p>Legos</p>  <p>Lincoln logs</p> <p>Bristle blocks</p>	
<p>Additional Interlocking Materials:</p>	<p>Pop beads, large links, other shapes that connect such as flowers, fish, or animals</p>	<p>Pegs with peg boards, pop beads, small waffle blocks, bristle blocks, and other connecting shapes</p>	<p>Interlocking blocks of varied sizes, interlocking logs, Duplos, Legos, Tinker Toys, and magnetic tiles</p>	
<p>Homemade Interlocking Materials</p>	<p>Interlocking pool noodles</p> 	<p>Interlocking cardboard</p> 	<p>Interlocking felt pieces with fasteners</p> 	<p>Interlocking tissue rolls</p> 

**When using materials with small pieces, check for size and potential choking hazards before use with young children.*

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Manipulatives</p> <p>Manipulative materials encourage a child to learn through touching, moving objects, ordering, weighing, arranging to fit, etc. Being able to physically manipulate objects help children have a deeper understanding of concepts that rote learning cannot provide.</p>	<p>Grasping Toys</p>  <p>Ring stack</p>  <p>Stacked nesting cups</p>  <p>Ball rattle</p> 	<p>Mr. Potato Head</p>  <p>Busy box</p>  <p>Large Lacing beads</p> 	<p>Lacing cards</p>  <p>Pegs with board</p>  <p>Gears</p> 
<p>Additional manipulative materials:</p>	<p>Busy boxes, nesting toys, textured toys, cradle gyms, rattles, cause and effect toys that respond when buttons are pushed</p>	<p>Stacking rings, medium nesting cups, shape sorting games, big pegs with peg board, bead mazes, simple lacing toys, etc.</p>	<p>Stringing beads, sewing cards, table blocks, pattern blocks, zip-snap-button dolls, nuts and bolts, wooden train tracks</p>
<p>Homemade Manipulatives</p>	<p>Cardstock Lacing cards</p>  <p>Lacing stems</p> 	<p>Egg crate stackable</p> 	<p>Homemade shape sorter box</p> 

**When using materials with small pieces, check for size and potential choking hazards before use with young children.*

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Puzzles</p> <p>Puzzles are made of shaped pieces that fit into matching spaces either in a frame or without a frame. Some puzzles are less complex with larger knobbed pieces and others are more complicated with more pieces and intricate design. Puzzles help develop fine motor skills as children must turn the pieces to line them up and then press them together.</p>	 <p>Chunky puzzles</p> <p>Large knob puzzles</p>	 <p>Small knob puzzles</p> <p>Chunky puzzles</p>	 <p>Framed puzzles</p>  <p>Floor puzzles</p>
<p>Additional Puzzle Types:</p>	<p>Easy to grasp and large piece puzzles, with only a few pieces</p>	<p>Large, chunky piece puzzles, smaller knob puzzles</p>	<p>More complex puzzles, framed puzzles, knob puzzles, table-top puzzles that teach concepts such as counting</p>
<p>Homemade Puzzles</p>  <p>Painted Wood Block Puzzle</p>	 <p>Cereal Box Puzzles</p>	 <p>Felt Pieces Puzzle</p>	 <p>Paper Plate Puzzles</p>  <p>Craft Stick Puzzles</p>

ART MATERIALS



Art materials are materials that children use to experiment with visual representation. When children are provided art experiences, they practice problem solving and develop fine motor skills that will aid them in later writing and self-help skills. Additionally, children can experiment in creative, hands-on ways with math and science concepts, such as space, line, shapes, and the combination of colors.










Art allows children to be creative and to express their ideas and thoughts. The more freedom children have in using these materials, the more benefits they will gain from the experience. Open-ended art projects that allow for individual expression teach children far more than teacher-directed crafts. Think process over product!

Art materials include the following categories:









drawing materials, paint, three-dimensional objects, collage materials, and tools.

Remember:



- Close, age appropriate supervision is required when children use art materials.
- Edible materials are not counted as art materials because they give a misleading message about the proper use of food and pose common allergen threats for children. Art materials should also be non-toxic and safe for the ages of children using them.
- Gluing 3-D materials such as pom-poms to a flat surface does not count as 3-D. Children should be encouraged to build up and out with 3-D materials.
- In order to be considered accessible for older toddlers and preschoolers, paints should be set up for use, or be stored in a way that a child can reach and use them without a teacher's help.
- Some tools require other materials to be accessible for them to be used and counted. For example, rollers and cookie cutters require playdough, and stencils require paper and pencils, crayons, or markers.

	Infants / Toddlers (Birth-23 months)	Two Year Olds (24 months-3 years)	Preschool (3 years - 5 years)
<p>Drawing Materials</p> <p>Drawing materials allow children to freely draw what they would like. Paper or another drawing surface must accompany the drawing materials. Drawing helps children develop the kind of fine motor skills that will help them learn to print and write as they grow as well as a wide variety of reasoning and problem-solving skills.</p>	 <p>Chubby Egg crayons</p> <p>*Drawing materials are not required for children under 24 months.</p>	 <p>Jumbo Crayons</p>  <p>Watercolor markers without caps</p>	<p>Color pencils</p>  <p>Dry Erase Board and Markers</p>  <p>Chalk</p> 
<p>Additional Considerations: Per ERSI, art materials, such as crayons or chalk, may contain the warning “not recommended for use by children under 3 years of age.” Unless such materials are specifically labeled as “toxic,” they may be used with younger children, but only under the most stringent supervision.</p>			<p>Additional Materials: Crayons, pencils, pens, markers, and oil pastels</p>
<p>Homemade Drawing Materials</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>DIY crayons</p> </div> <div style="text-align: center;">  <p>Melted crayons</p> </div> <div style="text-align: center;"> <p>DIY sidewalk chalk using Plaster of Paris and tempera paint</p>  </div> </div>			

**Close, age appropriate supervision is required when children use art materials.*

	Infants / Young Toddlers (Birth-17 months)	Older Toddlers / Twos (18 months-3 years)	Preschool (3 years - 5 years)
<p>Paints</p> <p>Painting with young children is a wonderful way to encourage children to express themselves while strengthening fine motor skills. Finger painting allows children to explore the feeling of the paint on their fingers and to use their fine motor skills to move the paint around. When painting with a brush, children use their fine motor skills to dip their brushes into the paint and wipe off the excess before moving the brush across the paper.</p>	<p>Art materials are not required for children under 18 months.</p>	<p>Tempera paint</p>  <p>Watercolor paints</p>  <p>Finger paint</p> 	 <p>Liquid tempera paints</p>  <p>Tempera cake paints</p>
<p>Additional Materials:</p>		<p>Liquid watercolors, glitter paint, powdered tempera paint, bubble paint</p>	
<p>Homemade Paint Materials</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="189 1182 305 1248"> <p>Ice Cube Paint</p>  </div> <div data-bbox="826 1156 973 1259"> <p>Homemade Paint Recipes</p>  </div> <div data-bbox="1340 1173 1495 1239"> <p>Homemade Bubble Paint</p>  </div> </div>			

**Close, age appropriate supervision is required when children use art materials.*

	Infants / Young Toddlers (Birth-17 months)	Older Toddlers / Twos (18 months-3 years)	Preschool (3 years - 5 years)
<p>Three-Dimensional Objects</p> <p>Three-dimensional means that the art children create has height, width, and depth. Using 3-D materials helps children explore spatial orientation and problem solving as they figure out how to connect these materials together.</p> <p>Note: Some 3-D materials require add-ons such as adhesive to be able to provide a 3-D experience.</p>	<p>Art materials are not required for children under 18 months.</p>	 <p>Playdough</p>  <p>Jumbo craft sticks</p>	 <p>Pipe cleaners</p>  <p>Wooden craft pieces</p>  <p>Modeling clay</p>

Additional 3-D materials include: Cardboard rolls, styrofoam balls, wiki-sticks, air dry clay, Floam, Scuplely, and floral foam, straws, pom poms, cotton balls. Some 3-D materials can be found around the house, such as recycling items like cereal boxes, empty plastic jars, and paper towel rolls. Different kinds of playdough can be homemade or made with children as an activity.

Homemade 3-D Materials

Tissue rolls



Empty cereal boxes



Empty plastic jars















Boxes

**Close, age appropriate supervision is required when children use art materials.*

	Infants / Young Toddlers (Birth-17 months)	Older Toddlers / Twos (18 months-3 years)	Preschool (3 years - 5 years)
<p>Collage Materials</p> <p>Collage materials allow flexibility as children create. Collage provides a different kind of fine motor practice than drawing or coloring, as children need to pick up each small collage material and glue or stick it on to the surface.</p> <p>Collage materials can be store bought or homemade.</p> <p><i>*When using art materials, check for size and potential choking hazards before use with young children.</i></p>	<p>Art materials are not required for children under 18 months.</p>	 <p>Short sections of ribbon</p>  <p>Large Foam Stickers</p>  <p>Yarn</p>	 <p>Feathers</p>  <p>Buttons</p>  <p>Cotton balls</p>  <p>Gems</p>
<p>Additional Collage Materials:</p>		<p>Large pom-poms, natural objects, cloth, stickers, and felt scraps</p>	<p>Pom-poms, sequins, glitter, natural objects, cloth or felt scraps, foam or wooden shapes</p>
<p>Homemade 3-D Materials</p> <p>Scrap paper</p> 	<p>Picture cut-outs</p> 	<p>Magazines</p> 	<p>Assorted tissue / paper</p> 

**Close, age appropriate supervision is required when children use art materials.*

	Infants / Young Toddlers (Birth-17 months)	Older Toddlers / Twos (18 months-3 years)	Preschool (3 years - 5 years)
<p>Tools</p> <p>Art tools are any additional items that children use to create art. Tools increase the amount of creativity that children can have when making art. Playdough tools allow children to create even more with playdough, and scissors allow children to change the shape of the materials they are working with. Tools also encourage a wide variety of fine motor skills, such as cutting, rolling, and pressing.</p>	<p>Art materials are not required for children under 18 months.</p>	<p>Glue Sticks</p>  <p>Tape</p>  <p>Playdough Rollers</p>  <p>Paint Brushes</p> 	<p>Safety Scissors</p>  <p>Paint Rollers</p>  <p>Stencils</p>  <p>Bottles of Glue</p> 
<p>Additional tools:</p>		<p>Paintbrushes with various widths and handle sizes, easy-to-use blunt scissors, self-stick stamps, tape</p>	<p>Hole/shape punches, tape, tools to use with playdough or clay, paintbrushes, sponge painters, dot paints, stamps and ink pads</p>
<p>Homemade Art Tools</p> <p>Cardboard paint scappers</p>  <p>Homemade Paintbrushes</p>  <p>Homemade glue</p>  <p>Sponges</p> 			

**Close, age appropriate supervision is required when children use art materials.*

MUSIC AND MOVEMENT



From a very early age, children show us that they enjoy music produced either from voices or instruments. Providing music instruments, music materials, and musical experiences can encourage children in their language, social-emotional, cognitive, and motor development.

Infants and toddlers are exposed to new sounds and words through songs. **Preschoolers** can learn concepts like cause and effect when working with different kinds of instruments.

Music can be used to encourage and enhance classroom activities, such as playing soft music at nap time and faster music to encourage dancing and gross motor movement.



Remember:

- When using musical toys that are battery operated, the batteries must be replaced when needed and the toy must be functional for it to be counted as a music material.
- The spread of germs should be minimized when children use music instruments with mouth pieces, such as a flute or harmonica. This can be done by sanitizing the material after each child or providing individual instruments for each child's personal use.

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Music Materials</p> <p>Music materials are things that children and teachers use or create to make or listen to music. These materials include: Musical toys, which are toys that play music; Instruments that allow children to create noise, music, or musical sounds; and recorded music that the teacher or children play using a CD player or other device.</p>	<p>Piano/ xylophone</p>  <p>Assorted instruments</p>  <p>Musical toys</p> 	<p>Maracas</p>  <p>Drum</p>  <p>Egg shakers</p>  <p>Rhythm Sticks</p> 	<p>Cymbals</p>  <p>Hand cymbals</p>  <p>Tone blocks</p>  <p>Triangles</p>  <p>Tambourine</p> 
<p>Additional Music Materials:</p>	<p>Musical mobiles, soft toys with bells inside, drums</p>	<p>Pianos, bells, xylophones, guitars, flutes, bongo drums, wind chimes, keyboards, multicultural instrument sets</p>	
<p>Homemade Materials</p>	<p>Rainsticks</p>  <p>Drums</p> 	<p>Guitar</p> 	<p>Homemade maracas</p> 

BLOCKS

Blocks encourage children to experiment with shape, size, balance, and gravity, and are essential materials to have accessible to children. Block play also helps children to develop spatial awareness, to collaborate with other children, and to improve fine motor skills.

- **Infants** might explore the texture and feel of the blocks, the sound blocks make when they are hit together or shaken, designs on the blocks, and how to stack a few blocks.
- **Toddlers** might begin to experiment to see what happens when blocks are stacked different ways, how varied sized blocks build differently, and begin to make simple structures with them.
- As children become **preschoolers**, they begin to make much more complex structures, often with an end goal of a specific structure in mind, such as bridges and intersecting roads, a zoo, a farm, or a house.

Remember:

- There are many different materials that people consider blocks, but the ERS tools define blocks. Blocks are geometric shapes with smooth sides that do not connect and fall over easily when stacked, and sides of blocks should be 2 inches or more.



Infants (Birth-12 months)

Toddlers / Twos (12 months-3 years)

Preschool (3 years - 5 years)

Blocks

The types of blocks recommended for different age groups of children differ because of age and ability. Young infants are provided with large soft blocks that are easy to grasp and are sometimes textured. Toddlers are given soft unit and hollow blocks that they can use to begin to safely experiment with building. Preschoolers can be given heavier wooden unit and hollow blocks because their gross motor skills are more developed, and they can manage them as they build larger and more elaborate structures.



Cloth unit blocks



Soft squeak blocks

Soft rattle blocks



Vinyl Blocks



Foam Unit Blocks

Cardboard Hollow Blocks



Wooden unit blocks



Wooden hollow blocks

Homemade Blocks:

DIY Paper Blocks











Duct tape blocks



Foam Blocks



	Infants / Toddlers (Birth-23 months)	Two Year Olds (24 months-3 years)	Preschool (3 years - 5 years)
<p>Accessories</p> <p>Block accessories enhance children’s play. For example, the use of accessories gives children cars for their roads, people for their towns, and animals for their farms.</p> <p>Accessories should be stored near the blocks so that children know that they are intended to be used in block play, and they should add to block play rather than detract from it. Block accessories should be proportional to the size of the blocks being used.</p>	<p>Accessories are not required for children under 24 months.</p>	 <p>Vehicles</p>  <p>Community workers plastic set</p>  <p>Wooden block people</p>	 <p>Farm animals</p>  <p>Zoo animals</p>  <p>Road Signs</p>
<p>Additional Accessories:</p>	<p>Small buildings, trees, plants, fences, other types of realistic diverse block people</p>		
<p>Homemade Accessories</p> <p>Homemade roads and road signs</p>	<p>Painted wooden block buildings</p> 		 <p>Cardboard parking garage used with blocks</p>

DRAMATIC PLAY

Dramatic Play is the act of simply pretending. Pretend play is essential for the growth and development of children, it allows children to use their imagination and act out roles. When using dramatic play materials, children should be free to use materials in their own way to cultivate their creativity.

Dramatic play materials should be plentiful and include a wide variety of materials and props. Having ample dramatic play materials to choose from enhances children's play and increases their opportunity for learning. When dramatic play materials and props are available both indoors and outdoors, children have more opportunities to engage in meaningful dramatic play.

Children see the greatest benefits of dramatic play when they have teachers who actively interact with them during play, talking about their play and joining in when appropriate. Through these purposeful interactions, teachers can help children develop language and communication skills as well as logic and reasoning skills, introduce vocabulary, include literacy concepts, and ask questions about math and science as they relate to the play.



For infants, dramatic play can increase their vocabulary as they learn words for everyday objects, such as hat, bowl, and cup. Introducing infants to dramatic play gives them their first experiences differentiating between real life and pretend things. Although infants usually play alone, dramatic play increases social-emotional skills and introduces the foundation for parallel play. They can mimic what they have seen their parents do, such as talk on the phone or give a baby a bottle. Even young infants can mimic a teacher patting or rocking a baby doll. Materials for infants should be simple and easily accessible.

Infants (Birth-12 months)

Infant Materials



Soft dolls



Pots and Pans



Toy telephones



Toy vehicles



Soft animals



Soft toy foods

Additional Materials: People figures of differing races, ages, gender, and abilities; toy animal figures; purses without straps

Dramatic play is important in the development of toddlers and twos. Dramatic play helps to expand their vocabulary, teaching them names for types of foods, dishes, and actions, such as stir or pour. It encourages them to use their expressive language skills and communicate with one another as they act out different roles. Teachers are essential for modeling roles, showing children how to use the materials, and encouraging children to try things on their own. Toddlers begin to move beyond mimicking to create their own ideas and stories as they develop.

Toddlers / Twos (12 months-3 years)

Toddler Materials



Child-sized play furniture

Dolls



Toy telephones



Play food



Cooking/eating equipment (pots, pans, dishes, cups)



Simple dress up clothes



Additional Materials: Doll furnishings, soft animals, small play buildings with accessories, cultural foods, people figures, toy animal figures, toy vehicles

Homemade Toddler Dramatic Play

Food made with wooden blocks



Cardboard Mailbox

DIY Stove/
refrigerator from
plastic storage
drawers



Dramatic play is essential for the development of preschoolers as it encourages them to develop their imagination and increase their empathy as they role play. It also allows them to work on their language, reasoning, and social skills as they communicate with one another, share ideas, listen, and pretend with one another. When ample and varied materials are provided for children to use in dramatic play, the possibilities of play and the benefits of dramatic play are enhanced and extended.

Preschool (3 years-5 years)

Doll furniture



Child-sized furniture



Cooking/eating utensils



Dress-up clothes for girls and boys

Toy Telephone



Dolls



Toy foods

Props for role play



Accessories



Additional Materials: stuffed animals, mirrors, restaurant menus, cultural foods, accessories (purses, tote bags, briefcases, glasses (no lenses))

Homemade
Preschool
Dramatic Play



Flower Shop

Cardboard
Pizza Oven



Post Office














NATURE SCIENCE

From a young age, children are fascinated by the natural world. When teachers encourage children as they explore the natural world around them, it lays the foundation for science learning as they grow. When children are provided many kinds of science materials and experiences, they readily explore nature and science concepts. As children begin to explore these materials, teachers can add vocabulary, add new concepts and information to extend their learning, and encourage children to ask questions and talk about what they see.

Nature/Science materials include the following categories: **living things, natural objects, factual books and picture games, tools, and sand and water.**



	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Living Things</p> <p>When children are given the chance to observe and care for living things, they learn about life processes, such as the need for air, food, and water. It also gives them a sense of responsibility.</p>	<p>Non-poisonous, living plants</p> 	 <p>Easily viewed bird feeder</p>	<p>Fish or other pets</p> 
<p>Additional Materials:</p>	<p>House plants or terrarium; plants sprouting from seeds; flower, vegetable, or herb gardens (outdoors or indoors); fresh cut flowers in water; class pet (rabbit, gerbil, hermit crab); aquarium with fish, snails, or other animals; ant farm; worm farm; butterfly hatching kit</p>		
<p>Natural Objects:</p> <p>Natural objects are things created by nature that can be found outdoors. Children can use these items to not only learn more about nature, but also to classify, categorize, and sort. Plants and animals that are encased in a hard plastic or resin are also considered here.</p>	<p>Seashells</p>  <p>Bird's nest</p> 	<p>Leaves</p>     	<p>Rocks</p>  <p>Insects in transparent plastic</p>
<p>Additional Materials:</p>	<p>Nuts (acorn, buckeye, walnuts), feathers (not dried), fossils, natural wood, pinecones, opened empty eggs from birds, dried flowers, seeds or pits from fruit, gourds</p>		

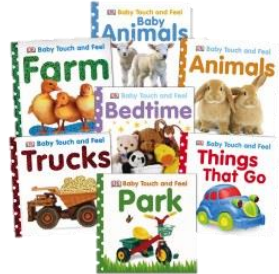
Infants (Birth-12 months)

Toddlers / Twos (12 months-3 years)

Preschool (3 years - 5 years)

Factual Books and Nature Science Picture Games

Factual Books and Nature Science picture games give children realistic facts about animals, nature, and health concepts. These materials help children to develop their senses and overall awareness of the natural world around them. Adding books to a science center also gives children the opportunity to research and investigate topics they are interested in or curious about.



Factual Books

Realistic
Simple
Animal
Games,
Pictures,
and
Posters



Factual Books



Five Senses
Game

Science
Memory
Games



Factual Books



Life Cycle Puzzles

Additional Materials: Nature/science puzzles with pictures, nature picture matching cards, nature picture sequencing cards, factual and realistic nature science videos or computer games, nature/science board games, file folders, science bingo

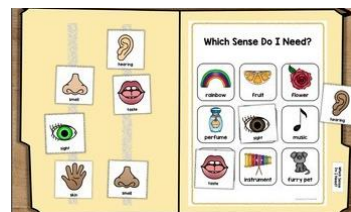
Homemade Books and Games



Leaf
Books













Nature/Science
File Folder Games



Cardboard
Leaf Matching
Game



	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Tools</p> <p>Nature/science tools allow children to experiment with scientific concepts and to explore the scientific process. Materials need to be provided with tools for children to get the most out of them. For example, magnet wands will need objects to attract; magnifying glasses will need objects to study; and microscopes will need slides to examine.</p>	 Magnetic Stack  Easy Hold Magnifier  Color paddles	<p>Large magnets with objects to attract</p>   Balance scale  Binoculars	 Funnels  Microscope  Eyedroppers  Magnifier glasses and tweezers
<p>Additional Materials:</p>	<p>Appropriate tools may be used with infants but are not required.</p>	<p>Scales, tape measure, rulers, test tubes, safety goggles, binoculars, prisms, kaleidoscopes, thermometers, working light table, flashlights</p>	

Homemade Science Tools

Smelling Bottles



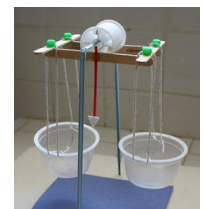
Rain Gauge



Weather station



Homemade scale



	Infants / Toddlers (Birth-23 months)	Two Year Olds (24 months-3 years)	Preschool (3 years - 5 years)
<p>Sand/Water</p> <p>Exploring water and sand through play helps children learn about the properties of these natural materials. Children can use tools and toys to learn how to sculpt things from sand, experiment with sink and float, and explore math properties, such as measuring liquids.</p> <p>Remember: There are some materials that cannot be substituted for sand/water play. Slime, goop, shaving cream, or food items, such as pasta, rice, or beans, cannot be used since they do not have the same properties as sand and cannot be used to dig, scoop, pour, and fill.</p>	<p>Sand/water is not required for children under 24 months.</p>	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="text-align: center;">  <p>Sand/water tables</p>  </div> <div style="text-align: center;">  <p>Sand/Water toys</p> </div> <div style="text-align: center;">  <p>Sifters</p>  </div> <div style="text-align: center;">  <p>Shovel and pail</p>  </div> <div style="text-align: center;">  <p>Watering can</p> </div> <div style="text-align: center;">  <p>Scoops</p> </div> <div style="text-align: center;">  <p>Floating toys</p> </div> </div>	

Additional Materials: Measuring cups, sponges, plastic toy animals, sink and float toys, coloring for water, bubbles for water, damp sand

Homemade Science Tools



DIY Floating Boats
(Sponges with straws)



Sand containers



DIY sand combs



DIY bottle funnel



MATH / NUMBER

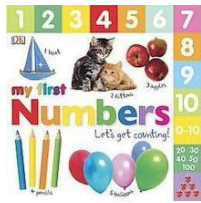







Children's experiences with math activities and materials set the foundation for their understanding of concepts, such as size, quantity, numbers, and shapes. Materials that are provided for children need to be developmentally appropriate for their level and interest.

Introduce math for **Infants, Toddlers, and Twos** naturally. These experiences should be informal and occur as children play with everyday materials or toys. Singing can also be another great way to begin to introduce math concepts, such as counting. **Preschool** experiences with numbers and math should relate math words and concepts to real world experiences and build the foundation for math in later years.

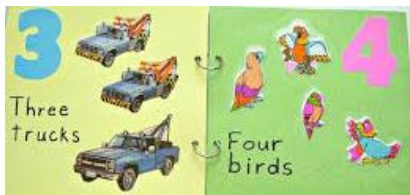
Math/number materials include the following categories: **counting/comparing quantities, measuring/comparing sizes/parts of wholes, familiarity with shapes, and materials showing the meaning of numerals.**

Remember:

- Some materials could fit in more than one category and assessors will count them in the category that is most needed to meet the requirement. For example, to decide if a puzzle that has both shapes and numbers on it will be categorized with the shape or number materials, the assessor will credit it in the category with the fewest number of examples.
- Materials that require several components will only be counted if all components are present. Similarly, if a math material requires additional materials for its use, those must be present for the materials to count. For example, measuring cups and spoons are only useful when they have materials with them to measure, such as sand or water.

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Counting /Comparing Quantities:</p> <p>Providing children with counting and quantity math materials can begin to expose them to math vocabulary that will lay the foundation for their math learning.</p>	<p>Counting Book</p>   <p>Number blocks</p>	<p>Ring dot counters</p>  <p>Counting bears</p>  <p>Counting Layer Cake</p> 	<p>Number puzzles</p>  <p>Dice</p>  <p>Abacus</p> 
<p>Additional Counting Materials:</p>	<p>Number picture books, number nesting cups</p>	<p>Cash registers with number keys, materials that show number and objects, phones, counting cookies, number blocks</p>	<p>Unifix cubes with trays, small objects for counting w/ trays, dominoes, playing cards, pegboards w/ numbers, beads with patterns, counting games</p>

Homemade Math / Number Materials

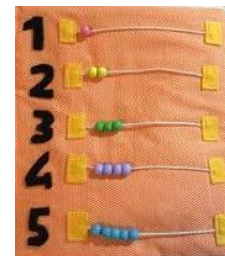


DIY Counting books


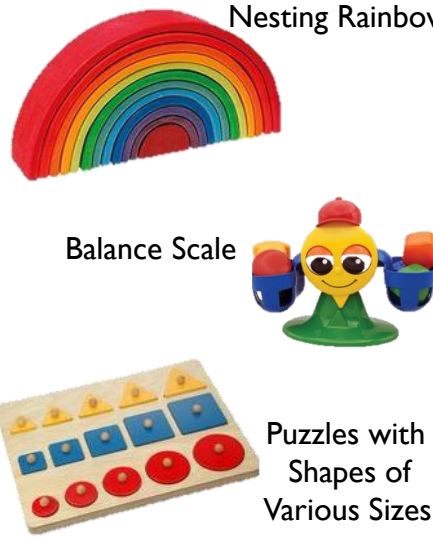
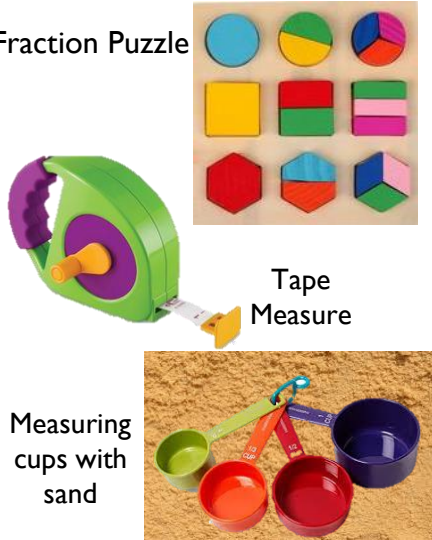
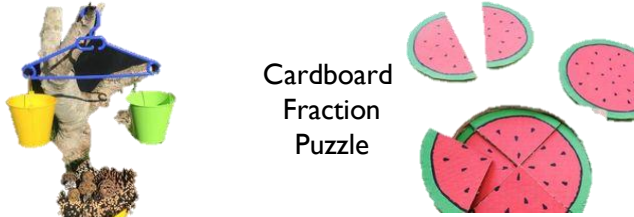


Felt Fingers Counter















Abacus



Ring counter for preschoolers

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Measuring/Comparing Sizes/Parts of Wholes:</p> <p>Early hands-on exposure to materials that help children learn to measure, compare sizes, and experiment with parts of a whole will help lay a firm foundation for their math learning.</p>	 <p>Stacking rings</p> <p>Nesting cups</p>	 <p>Nesting Rainbow</p> <p>Balance Scale</p> <p>Puzzles with Shapes of Various Sizes</p>	 <p>Fraction Puzzle</p> <p>Tape Measure</p> <p>Measuring cups with sand</p>
<p>Additional Measuring and Comparing Materials:</p>	<p>Balls or other toys of various sizes</p>	<p>Large safe tape measures, stacking rings, nesting cups, toys of various sizes</p>	<p>Unifix cubes with trays, bathroom scale, growth chart, measuring games, thermometer, sand timers, puzzles or games showing parts of a whole, nesting dolls</p>
<p>Homemade Materials:</p> <p>Balance Scale with a hanger</p>	<p>Cardboard Fraction Puzzle</p> 	<p>Nesting Lids</p> 	<p>Big and small activity box</p> 

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
<p>Familiarity with shapes:</p> <p>Providing young learners with a variety of shape materials is an important piece of their early math learning. Learning to recognize shapes help children to visually organize what they see and teaches them to recognize signs and symbols, which lays a crucial foundation for math, reading, and science learning.</p>	 <p>Soft blocks w/ shapes</p>  <p>Shape sorter</p>	<p>Shape puzzles</p>   <p>Pattern block puzzles</p>  <p>Connecting shapes</p>	<p>Unit Blocks</p>  <p>Shape Puzzles</p>  <p>Attribute Blocks</p> 
<p>Additional Shape Materials:</p>	<p>Shape books, rattles with shapes, geo-stackers, grasping toys, easy busy boxes with shapes</p>	<p>Busy boxes with shapes, shape sorters, activity boxes with shapes, shape cupcakes, books</p>	<p>Shape links, geometric shape puzzles, geoboards, parquetry blocks with patterns, magnetic shapes, shape stencils, books</p>
<p>Homemade Materials:</p>	 <p>Stick Shape Puzzle</p>  <p>Homemade Felt Shape Book</p>  <p>Shape Sorting Activity with an Ice Tray</p>  <p>Cardboard Shape sorter box</p>		

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
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Materials showing the meaning of numerals:

When numbers are accompanied by pictures that show what the number means, numbers are more meaningful to children.



Counting Book



Counting Cookies

Number/Object Puzzle



Counting popcorn



Corresponding puzzles

Counting dots



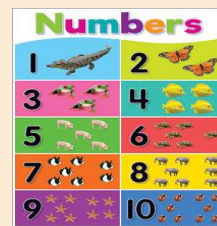
Number pegs

Display showing the meaning of numerals:

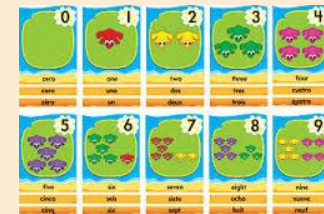
Center Signs



Number Poster



Number Line Posters



Homemade Materials:

Felt or Cardboard
Pizza Slice
Counting Board



Child Response Graph



Felt or Foam
number
puzzles



PROMOTING ACCEPTANCE OF DIVERSITY



The ERS scales use the word **diversity** to refer to the differences between groups of people regarding race, religion, culture, gender, age, or ability. When early childhood programs give children the opportunity to learn about diversity through the materials and activities provided in the classroom, children understand more about the people and world around them.

According to the ERS instruments, **acceptance of diversity** means that instead of viewing differences as a negative, differences are considered strengths, adding more flavor to life and allowing all to contribute in unique ways.

Promoting acceptance of diversity materials include the following categories: **culture, race, ability, age, and nontraditional gender roles**. Materials that count in this item may also count in other items. For example, a book showing a picture of a child wearing eyeglasses will also count in books, and pretend foods from different cultures will also count in dramatic play.

Remember: Examples must demonstrate a contrast in diversity. For example, a taco would not count as an example of cultural diversity alone, but when paired with food from another culture, such as sushi, the pair would count as one example.

**Infants
(Birth-12 months)**

**Toddlers / Twos
(12 months-3 years)**

**Preschool
(3 years - 5 years)**

Culture

Culturally diverse materials introduce children to customs that people may experience in different parts of the world, demonstrated by showing contrasting examples of traditional clothes worn, food eaten, realistic photos of customs taking place, and/or experiencing cultural music materials.



Additional Cultural Materials:

Dramatic play dishes or props, posters, picture card games, play foods from many cultures, posters, puppets, restaurant menus, multicultural instrument sets

Homemade Diversity Materials

Felt Sushi



Felt Ravioli



Bongo drums with cans



DIY Sombrero



DIVERSITY MATERIALS

	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
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Race

Racially diverse materials introduce children to the contrasting ways people can look by including examples of materials showing people of varied skin tones, facial features, races, and ethnic groups. This helps children to become familiar with people in our world and to value people from all races and ethnic groups.



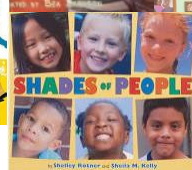
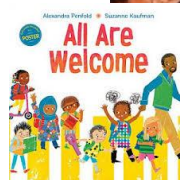
Dolls



Multicultural Crayons



Books



Puzzles



Puppets



Additional Materials:

Posters, bingo games showing people, felt stories, block people, language sequence cards, community helper picture cards, art materials (people cut outs, multicultural paint, multicultural colored pencils)

Homemade Diversity Materials



Felt Dress-Up Dolls

Tissue Roll Block People



DIY Photo puzzles



	Infants (Birth-12 months)	Toddlers / Twos (12 months-3 years)	Preschool (3 years - 5 years)
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Abilities

Materials that show people with differing abilities help children to understand others around them who may think, speak, act, or move differently than they do. This is typically demonstrated by showing contrasting examples of people using varied communication methods, people who use equipment to assist them (hearing aids, walkers, eyeglasses, wheelchairs, etc.), and people with differing abilities interacting in activities children can relate to.

Block people



Puzzles



Dramatic play props



Posters



Math and language games

Additional Materials:

Books, bulletin boards, puppets, dolls, floor puzzles, display photos

Homemade Diversity Materials

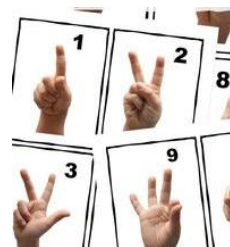


Felt people with eyeglasses



Homemade peg dolls with eyeglasses

ASL Flashcards



Letter and sign match cards



DIVERSITY MATERIALS



**Infants
(Birth-12 months)**

**Toddlers / Twos
(12 months-3 years)**

**Preschool
(3 years - 5 years)**

Age

Diversity in age means that the materials show contrasting examples of a wide span of ages, including senior citizens, younger adults, teenagers, children, and infants.



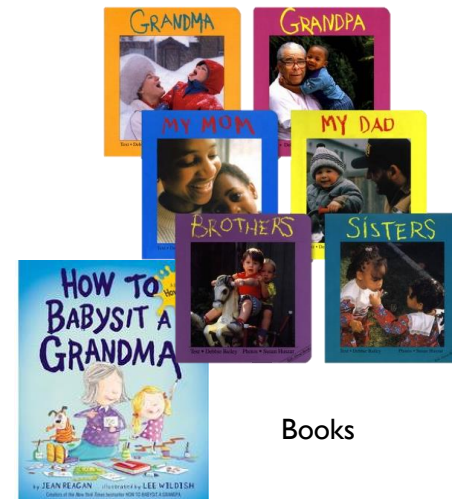
Block people



Finger Puppets



Puzzles



Books

Additional Materials:

Posters, picture card games, felt stories, dolls, puppets

Homemade Diversity Materials:



Homemade puppet



Homemade craft stick puzzle



Homemade memory game



Homemade peg dolls

**Infants
(Birth-12 months)**

**Toddlers / Twos
(12 months-3 years)**

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(3 years - 5 years)**

Gender Roles

Gender Roles are a set of norms that society considers acceptable, appropriate, or desirable for people of certain genders. Materials that show non-traditional gender roles help children to see that men and women can do both traditional and non-traditional tasks.



Puppets



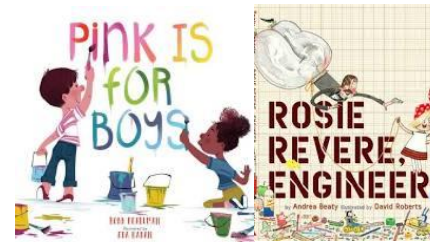
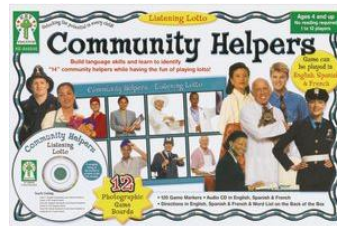
Puzzles showing gender diversity (Ex: female scientist)

Posters showing non-traditional gender roles
Ex: female doctors, male nurses, male teachers, etc.



Career block people

Community Helpers Games



Books



Additional Materials:

Dramatic play clothes, books, picture card games, block figures

Homemade Diversity Materials:

Printable match-up game



DIY Peg dolls with female doctors and police officers



Craft stick puzzle