

Useful Questions During Block Play (grouped by Domain)

SOCIAL/EMOTIONAL

- *How do you feel when your tower gets higher?
- *Did you do this by yourself or with friends?
- *Can other friends do this too?
- *How did you know you could do it on your own?
- *Your friend is having a hard time with her blocks. She seems upset. What could you do to help?
- *I see Jacob has a block that you want. How could you ask him?
- *I see Jenny has asked you to keep all of the long blocks for your building but *Jacob would like to build with them as well and there are many. Is it okay to keep all of the blocks for yourself and your friend?
- *When your tower falls down how do you feel?
- *I heard you say, "my tower is taller than yours!" to Matthew and he got upset. *Why do you think he is upset? How could you make him feel better?
- *How could you include friends in your building?

PHYSICAL

- *I see you made a balance beam. What can you do with it?
- *If you put more blocks on top of that tower, what could happen?
- *Can you carry all of those blocks?
- *Are they heavy or light?
- *How can you help keep the blocks in the block area?
- *I see you wanted to throw a block. Why don't we throw blocks?
- *Can you build as tall as you are?
- *We don't knock down friend's towers but you may knock down your own. *Why don't we knock down our friend's towers?
- *We don't bang and hit with the blocks. Why don't we hit with the blocks?

COGNITIVE/SCIENCE/MATH

- *Which blocks are the biggest, heaviest, longest and shortest?
- *What will happen when the block gets knocked off the top of the tower?
 - *Why does it fall?
 - *Can those blocks balance on top of that tower?
- *Which blocks would be good on the bottom of your tower or building if you were building a tall structure?
 - *How can we measure our tower?
 - *How can you measure your road?
 - *What does the block feel like? Does it have a texture?
- *When you have finished your building, will you be able to live inside it?
 - *How many different kinds of blocks do we have?
 - *Where do we keep them and how do we put them away?

LANGUAGE/LITERACY

- *How can we label where our blocks go? What is a label?
- *What can you tell me about your building? What is it like to live there?
 - I see you've made a store. *What can we do to make some signs?
 - Where is the door for your building? Would you like to make a sign?
 - Can you tell me a story about what has happened in your farm?
 - How many animals are here? What kinds of animals live in this farm?

QUESTIONING FOR TEACHERS FOR OPTIMAL BLOCK PLAY

Is the block area located in a space free from traffic?

Is the area carpeted to reduce noise and provide a soft surface for sitting?

Are there sufficient props and accessories to enhance the block area?

Are there writing and reference materials available to extend the learning experience?

Are the children given lots of opportunity to solve problems themselves?

Is there a camera available to photograph structures?

Are the children encouraged to construct and build after a learning experience ie: a field trip or story?

Does the schedule allow for large blocks of time for construction?

SUGGESTED MATERIALS FOR ENHANCING THE BLOCK AREA

Rubber wooden or plastic animals

Small traffic signs or other signage

Paper, pencils, erasers for literacy opportunities

Clipboards and small workbooks

Small snap blocks for measuring

Measuring tapes, rulers

Tongue depressors

Popsicle sticks

Easter grass

Bubble wrap

Styrofoam packing bobbles

Vehicles

Pipe cleaners

Plastic, wooden or rubber people

Stuffed animals

Small housing furniture

Smaller cubes and items to decorate

Stages of Building to Assist Questioning

Stage 1 Tote and Carry (2 and 3 years old)

At this stage, one of the first activities is the act of carrying around the blocks or piling them. It is a full sensory experience as the child experiences the smoothness, the weight, the size and the sounds they make when they drop the blocks. In this stage, the child is learning about blocks and what blocks can do.

In this stage, children carry, move, touch, hold, pile, knock down, drop, and feel the blocks. Children do little or no building. Instead, they explore the properties and characteristics of the blocks. Children answer the question, "What can I do with these?"

Accessories to support learning: baskets, buckets, containers, pans boxes, little suitcases, handbags, wagons, big trucks

Math concepts inherent at this stage: Attributes (color, size, shape, orientation, texture), measurement/comparison. These concepts will later lead to sorting, which helps us count and compute as we group and re-group sets of objects, make patterns, create balance, find equality, use different units to measure, identify geometric attributes, and organize data.

Science concepts inherent at this stage: Properties of matter (The physical properties of blocks differ.)

Stage 2 Building Begins (3 years old)

At this stage, a child will pile the blocks to make a tower or lay the blocks on the floor in rows, either horizontally or vertically. There is much repetition in their building. It is in this stage that the first application of imagination occurs as props such as cars or trucks are used on "roads."

In this stage, children stack blocks vertically, lay them down and line them up, or configure them horizontally. One block may be laid across another. Children will often repeat a pattern over and over. "Stack and row" is a good name for this stage. Many times, you will observe children forming a combination of stacks and rows.

Accessories to support learning: vehicles, street signs, trees, a floor mat or boundary marked on the floor, simple block pattern cards

Math concepts inherent at this stage: ordering/seriation, equivalent length, ratio of length, sorting, weight, corners/edges/surfaces, one-to-one correspondence

Science concepts inherent at this stage: The balance and stability of a structure are influenced by

1) the placement and position of different-sized and -shaped blocks, and 2) the floor surface. Children are exploring gravity and force.

Stage 3 Bridging (3 and 4 years old)

At this stage children begin to experiment connecting two blocks with a space between them with a third block. Children learn to bridge by trial and error as they begin to explore balance and their eye-hand coordination improves.

This stage is known as bridging. It is the stage when children begin to make structures. Bridging is when children form a space between two blocks, and then place a block to span the space. Eventually, as the child masters and expands bridging, her bridges become more elaborate. Typically the child will build in the stacks and rows she previously made and add the bridges.

Accessories to support learning: boats, blue cloth (water), photos and drawings of bridges, cake columns (used to hold up wedding cakes), paper towel rolls, sturdy lengths of cardboard

Math concepts inherent at this stage: Spatial concepts (e.g., positional words, relationships, maps/directions), Geometry concepts (e.g., recognizing and naming shapes, transformation)

Science concepts inherent at this stage: compression and tension

Stage 4 Enclosures (4 years old)

At this stage, a child will place blocks so to enclose a space. This shows an understanding of inside and outside. Enclosures, like bridges, become landscapes for imaginative play with props like dollhouse dolls, farm animals and such. Enclosures and bridging are the first "technical" acts of block building that children accomplish.

This stage involves making enclosures. At this stage, children can close up a space between blocks with another block(s). Children begin problem solving by planning ahead how they will close up spaces. After mastering enclosures by lying the blocks flat on the floor, children make an enclosure by standing the blocks on edge, and they may incorporate bridging. Children add figures, which take on imaginary roles as children play out social motifs that are meaningful to them.

Accessories to support learning: photos of enclosures, animals, fruits and vegetables, plates and bowls, lengths of ribbon, yarn or rope, dollhouse furniture and dolls

Math and Science concepts inherent at this stage: Architectural features (e.g., interior and exterior space, perimeter, measurement, number of openings, numeral

awareness/recognition, number relationships, problem solving/computation, Parts-to-whole relationships) (www.progressiveearlychildhoodeducation.blogspot.com)

Stage 5 Representational Building (4 and 5 years old)

At this stage you will see children using symmetry, patterns, balance, and designs to create buildings. There is an element of dramatic play to their block building. The play can include naming the structure and its function (and letting those who interfere or who try to redesign know they are wrong!). If you teach pre-k or Kindergarten you know that if two children are building a specific structure and a third child attempts to alter the structure - upset results!

This is the stage where children begin making elaborate, decorative structures. For example, the child may incorporate a bathtub, store, farmyard and swing into the same structure. Often, children name their structures (although the names rarely define the structure's function). Patterns emerge in children's structures, and symmetry is more intricate.

Accessories to support learning: large photos of structures, books about building, tall boxes (skyscrapers), paper, blank books, clipboards, writing tools, scissors, tape, task cards, fabric, tiles, palm leaves, carpet squares, large pieces of cardboard, shingles, small rugs or blankets, mirrors, tools, tape measures, dress-up clothes, pulley, small branches, tree cookies, small embellishments (aka loose parts, e.g., 1" color cubes, counters, shells, pebbles, seed pods, pinecones)

Math concepts inherent at this stage: Patterns, symmetry, equality, classification

Science and Social Studies concepts inherent at this stage:

- 1) Structures vary in function,
- 2) Physical geography defines the use of land surface in a community,
- 3) Observations, books, tools and technology can help with investigations.

Stage 6 Complex Building (5 years old and up)

By age 5, the dexterity and skill of block play is quite elaborate! You will see curved buildings, multiple levels, the building over other structures and toys. The children are in the stage of cooperative play and it is not uncommon for discussions of what they want to build, how they may build the structures and what part each will play in the "drama". At this stage it is helpful to have a wide range of sizes and types of blocks available.

At this stage, children work cooperatively to build a structure, deciding in advance what they will build. They build their structures to look much like what they have planned in advance. Due to the complexity of the structure and the commitment of the children, they typically want to build and play with the structure over a period of several days. While building, the children assign each other roles, and they use a variety of materials to achieve the desired effects. They will also begin dramatic play around the block structure.

Resources

Source for descriptions of each stage (in blue): MacDonald, Sharon, *Block Play: The Complete Guide to Learning and Playing with Blocks*, Gryphon House, 2001

References: Copeland, Sherry M. and Schwartz, Sydney L., *Connecting Emergent Curriculum and Standards in the Early Childhood Classroom: Strengthening Content and Teaching Practice*, Teachers College Press, 2010

<http://fairydustteaching.com/2011/03/developmental-stages-of-block-play/>

www.progressiveearlychildhoodeducation.blogspot.com