

## A Letter to Families about Block Play



Dear Families,

The hardwood unit blocks you see in our classroom are among our most valuable learning materials. They come in proportional sizes and various shapes. When children build with blocks, they begin to understand math concepts. For example, they learn about volume when they find the number of blocks that fill a certain space. They compare the heights of their buildings and learn about geometric shapes (triangles, squares, and rectangles). When they lift, shove, stack, and move blocks, they explore weight and size. Each time they use blocks, children make decisions about how to build structures and solve construction problems.

Children often use blocks to represent the world around them, perhaps a road, a house, or a zoo. As they work together, they learn to cooperate and begin to understand friendship. To promote language development and expand children's play, encourage them to talk about what they are doing. Here are examples of what you might say and ask:

“I see that you made a tall apartment building. How do people get to their floors?”

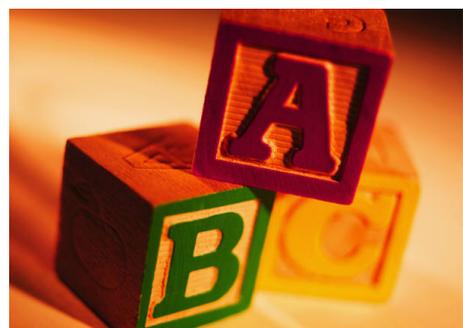
“Where do people park their cars when they come to the shopping center?”

“Would you like to make a sign for your building?”

These questions and comments make children more aware of what they are doing and encourage them to try new ideas.

### What You Can Do at Home

You can encourage your child to learn through block play by taking an interest in what he or she does at Ladybug. Please spend time in our Block area to see your child building with and caring for blocks. When you take a walk in your neighborhood, point out roads and interesting buildings. You may want to purchase table blocks, colored wooden cube blocks, or cardboard brick blocks to have at home. You can also make a set out of milk cartons, which come in different sizes. Store them in shoe boxes or plastic tubs and put a picture and word label on the container so your child knows where the materials belong.



Identify a place where your child can build and play with blocks safely. Props such as clothespins, small plastic animals, and cars and trucks will extend your child's play and inspire new ideas. The setting your child creates can also be used for pretend play.

## What Children Learn in the Block Area

Blocks offer many opportunities for learning through play. Here are some examples of what you can do to support your child's learning with blocks:

### Literacy

Expand your child's vocabulary and oral language by talking about their buildings. Introduce new words such as front-end loader, cylinder, and arch as they use blocks and props. Invite your child to talk about their work.

Promote understanding of books and other texts by having in your house books related to children's interests and constructions. Help your child use books to answer their questions (e.g., a book on bridges, or how to build a house).

### Mathematics

Teach number concepts by suggesting that your child put away blocks in sets. Ask number questions.

Encourage your child to explore patterns and relationships by pointing out patterns he or she has made in their constructions. Suggest that they draw pictures of their block designs.

Emphasize concepts about **geometry** and **spatial sense** by organizing blocks by size and shape on the shelf and making a label for each shape. Teach your child the names of block shapes (cylinder, half-circle, triangle and so on). Talk about positions in space (over, under, on top of, next to, beside, though, above, below inside, and outside).

Nurture their interest in measurement by offering materials such as string and rulers so they can measure their buildings.

### Science

Encourage your child to explore physical science by providing balance scales, pulleys, mirrors, and pipes. Take an interest in their explorations of blocks.

Expand your child's knowledge of life science by adding plastic or wooden animals so children can build animal homes such as barns, caves, cages, and other shelters. Provide artificial plants and flowers to encourage them to create different animal habitats.

Promote understanding of Earth and the environment by providing telephone wires and pips as building materials and talking about how electricity and water get into buildings. Include natural materials such as rocks, acorns, shells, pinecones, and twigs to use in constructions.

### Social Studies

Encourage learning about spaces and geography by talking about roads your child is making and where they go. Display maps and help them figure out how to build models of their neighborhoods with blocks.

Explore concepts related to people and how they live by learning about different business and jobs in the neighborhood. Provide props that show people engaged in a range of jobs. Display books and pictures about how people live and work and talk to your child about them.

### The Arts

Promote drama skills by encouraging your child to use block structures as settings for dramatic play. Provide props such as hats, empty food containers, and a steering wheel to use with hollow blocks.

Nurture the visual arts by encouraging your child to create original designs and structures with blocks. Suggest that they draw pictures of their structures to help remember them.

### Technology

Help your child explore basic operations and concepts by including ramps, wheels, and pulleys. Talk with them about what makes a building stable.

Provide equipment for them to take photographs of block structures, and then display the photos. Help them use a computer to make building plans for their block structures.



## How Block Play Promotes Development and Learning

### Social -Emotional

In the Block area, children negotiate the use of materials, determine how many children can work comfortably in the area, care for materials, and follow the rules for building safely. They also exchange ideas. Especially when one child's idea of how to build a structure differs from another child's; children expand their knowledge and learning to respect viewpoints different from their own.

### Physical

Children's small muscles develop when they carry and carefully place blocks together to form a structure or make an intricate design. They gain large-muscle strength by using hollow blocks, and they improve eye-hand coordination when they carefully balance blocks so they will not tumble.

### Language and Literacy

Children are very willing to talk about their constructions when adults ask questions and show genuine interest. They increase their vocabularies when adults tell them new words to describe what they are doing, and they practice writing skills as they make signs for their buildings.

### Cognitive

Children try to make sense of their experiences by connecting new information with what they already know. Playing with blocks gives them an opportunity to reenact experiences and process information. Creating representations of their environments is a basis for more complex abstract thinking. Moreover, block play promotes understanding of essential concepts. Children learn about size, shape, number order, area, length, patterns, weigh, balance, and cause and effect as they select, build with, and put away blocks.

# Stages of Block Play

## Carrying Blocks

Young children who have not played with blocks before are likely to carry them around or pile them in a truck and transport them. These children are interested in learning about blocks; how heavy they are, what they feel like, and how many can be carried at once. By experimenting with blocks, children begin to learn their properties and gain an understanding of what they can do and cannot do with blocks.

## Piling Blocks and Making Roads

Children in Stage II continue to explore the properties of blocks and how they can be used. They make towers by piling blocks on top of each other, and they discover what different arrangements look like as they place blocks on the floor.

At this stage, children also begin to use their imaginations and apply important cognitive skills. To young builders, flat rows of blocks on the floor typically suggest a road. They elaborate on their constructions by using props such as cars and trucks if they are available. Making roads during Stage II marks the transition from simple piling to using blocks more deliberately. Children who have been building roads find they can use roads to link towers. This discovery leads to an active stage of experimentation and problem solving.

## Connecting Blocks to Create Structures

In stage III, children use their experience with blocks to expand their construction techniques. These are the typical techniques used by children in Stage III:

Bridging – To make a bridge, children set up two blocks, leave a space between them, and connect the two blocks with another block. When children explore bridges, they explore balance and special relationships, and they improve their eye-hand coordination.

Making Enclosures – Children put blocks together to enclose a space. Making enclosures also helps children think about mathematical concepts, particularly area.

Designs – Children are fascinated with symmetry, balance, and patterns and they use blocks to make decorative patterns and symmetrical layouts. Once they have combined a few blocks in a design, they can continue the same pattern until their supply of blocks runs out, or they may try variations. Blocks become an art medium for children to express their ideas.

## Making Elaborate Constructions

Experienced builders are able to put blocks together with dexterity and skill. Children learn to adapt to change in their building area by curving structures and by building them above, around, or over obstacles. Children in Stage IV often create artistic and complex structures.

During this stage of block play, children need a variety of block sizes and shapes so they can make their constructions more elaborate. Another hallmark of Stage IV is that children use them as settings for dramatic play, often labeling them and even making signs so others will know what they built.

## Props & Accessories for Block Play

A doll house with furniture in small containers

Cars and trucks

Plastic animals

Traffic signs and gas pumps

Telephone wire

Paper towel rolls

Thin pieces of rubber tubing

Paper, markers, scissors, and tape

Wooden craft sticks

Hats

Pulleys and string

Toy carpentry tools

Books, magazines, or postcards with pictures of buildings, roads, and bridges

Map of a city

Castle blocks

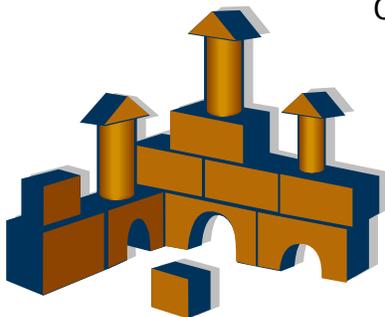
Shells and rocks

Cardboard boxes and shoeboxes

Play money

Large fabric scraps

Driftwood or small logs



## Frequently Asked Questions about Blocks

My child doesn't want to spend time building because they know they have to take it down and clean it up. What should I do?

When a child has made a building that is very special to them, it is sometimes difficult for them to dismantle it when it is time to clean up. If possible, try to leave buildings up overnight or even for a week. This enables your child to work on a construction over time, which leads to more elaborate building and often dramatic play.

If that is not possible at your home, offer to take a picture of the buildings so your child can preserve their work in photos. Displaying these pictures in your home often encourage children to create, reproduce, and build more complex structures. Taking pictures of a child's work over a period of time creates a record of the child's progress. Another alternative is to invite children to make and display drawings of their buildings.

How high should children be allowed to build?

There is something very intriguing and empowering about building tall structures. Of course safety is the issue. We recommend developing house rules about tall buildings. For hollow blocks, a good rule is not to build structures taller than four blocks. For unit blocks, you will have to use your best judgment. At Ladybug, we establish the rule that structures may not be taller than the builder. Talk with children about making their constructions strong so they are less likely to topple over. Discuss building away from walkways and talk about not knocking blocks down.



Should I intervene when children use blocks as guns?

Given the increasing level of violence in children's lives, we suggest making your child's playroom a "gun-free zone." Children make guns when they cannot think of more interesting things to do with blocks. Just saying "no gun building" does not solve the problem. Sitting down and helping your child come up with other construction ideas has a more lasting effect. Displaying pictures of community structures helps. Inspire children by taking and displaying photos of their work.