Developed by
The Southern District Family Living Program
Children are born learners. Every day, they learn new skills they will build upon as they grow. Children need experiences to be stimulating, fun, and interactive.

Adults can guide children’s early learning experiences and use blocks as the tools to support their development. Playing with blocks can provide experiences where children learn math and science, new words and pre-reading skills, social skills, and physical skills.
This handbook will help you make the most of block play. Unit blocks, foam blocks, cardboard blocks, unit cubes, KEVA planks, and any kind of blocks offer both fun and learning.

The University of Wisconsin-Extension welcomes you and your child to a Block Party!

Enjoy exploring the world of blocks!
Blocks are a tool for learning MATH SKILLS! When playing with blocks, children can learn:

- **Counting and quantity**
  
  *How many blue blocks do you have?*

- **Shapes**
  
  *Can you find another square block?*

- **Sizes**
  
  *Try this smaller block and see if it fits.*

- **Adding and subtracting**
  
  *Add two more blocks to the tower.*

- **Sorting**
  
  *Let’s find all the green blocks and put them away first.*

- **Patterns**
  
  *You used a pattern: red, yellow, blue, red, yellow, blue.*

- **How to put things in order**
  
  *Line the blocks up, smallest to largest.*
To encourage **MATH SKILLS** in your child, use words such as:

<table>
<thead>
<tr>
<th>Long</th>
<th>Pattern</th>
<th>More</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall</td>
<td>Sort</td>
<td>Less</td>
</tr>
<tr>
<td>Short</td>
<td>Measure</td>
<td>Fewer</td>
</tr>
<tr>
<td>Curve</td>
<td>Estimate</td>
<td>Same as</td>
</tr>
<tr>
<td>Straight</td>
<td>Square</td>
<td>Larger</td>
</tr>
<tr>
<td>Narrow</td>
<td>Triangle</td>
<td>Smaller</td>
</tr>
<tr>
<td>Wide</td>
<td>Circle</td>
<td>Least</td>
</tr>
<tr>
<td>Count</td>
<td>Rectangle</td>
<td>Most</td>
</tr>
<tr>
<td>How many</td>
<td>Top</td>
<td></td>
</tr>
<tr>
<td>Add</td>
<td>Bottom</td>
<td></td>
</tr>
<tr>
<td>Take away</td>
<td>First</td>
<td></td>
</tr>
<tr>
<td>Order</td>
<td>Last</td>
<td></td>
</tr>
</tbody>
</table>

**MATH SKILLS** in action:

- A child tells a friend that her tower is bigger because she used more blocks.
  - **What it means:** This child is using words to compare quantity (i.e., more, less, greater than, fewer, same).

- A child makes a “fence” by alternating square- and rectangle-shaped blocks.
  - **What it means:** This child recognizes a pattern.

- A child counts blocks and then asks a friend for four more.
  - **What it means:** This child understand that a number means “how many” or a quantity.

- A child stacks five rows of five blocks each and counts 5, 10, 15, 20, 25.
  - **What it means:** This child is counting by fives and gaining an understanding of the basic facts of multiplication.
Blocks are a tool for learning **SCIENCE SKILLS**! When playing with blocks, children can learn:

- **Observation**
  
  *This block is very smooth.*

- **Comparison**
  
  *Which tower is taller?*

- **Guessing**
  
  *Do you think one more block will make it fall over?*

- **Experimenting**
  
  *Try it and see what happens!*

- **Cause and effect**
  
  *It fell over because the top block was too big.*

- **Weight**
  
  *Which block is lighter?*

As children build structures, encourage them to observe their work, ask questions, and plan or predict what will happen next.

- **What would happen if you set the big rectangle block on the round column block?**

- **How do you think your castle would be different if you used the foam blocks instead of the cardboard blocks?**
To encourage **SCIENCE SKILLS** in your child, use words such as:

- Rough
- Smallest
- Whole
- Smooth
- Bigger
- Stable
- Heavy
- Biggest
- Motion
- Light
- Cause
- Balance
- Size
- Explore
- Flat
- Weight
- Discover
- Incline
- Gravity
- Compare
- First
- What if
- Next
- Predict
- Last
- Solve
- Smaller
- Series

**SCIENCE SKILLS** in action:

- A young child carries blocks around in his/her hands and places them in a bucket.
  
  ⇒ *What it means:* This child is learning about weight and size.

- A toddler builds a block tower, then laughs as he/she knocks it down.
  
  ⇒ *What it means:* This child is experimenting with cause and effect.

- A first-grader wants to put the wooden blocks down first when building a tower, so the foam blocks don’t get squished.
  
  ⇒ *What it means:* This child understands that there are several factors to keep in mind when building stable structures.
NEW WORDS AND PRE-READING SKILLS

Blocks are a tool for learning NEW WORDS and building PRE-READING SKILLS! When playing with blocks, children can learn:

- **Pretending**
  
  *This block can be my cell phone!*

- **New words**
  
  *This block is shaped like a rectangle. It’s rectangular.*

- **Letters and printing**
  
  *Let’s make a sign for the store you built.*

- **Storytelling**
  
  *Tell me a story about what you are building.*

- **Listening**
  
  *Let’s ask your sister to tell us a story about her building, too.*

Children need to see writing and words everyday, so add signs to the block play or have paper and crayons ready for children to add their own!
To encourage **NEW WORDS** and **PRE-READING SKILLS** in your child, keep your child thinking and talking. For example, encourage your child to draw a picture of his/her block structures and explain what he/she is building and drawing. Use phrases such as:

- *Tell me about . . . *
- *What would happen . . .?*
- *How will you know . . .?*
- *What do you think . . .?*
- *What is the same about . . .?*
- *What would make it . . .?*
- *What is the difference between . . .?*

**NEW WORDS** and **PRE-READING SKILLS** in action:

- A young child puts a rectangular block to his/her ear and “talks on the phone.”
  - *What it means:* This pretending is important. If a block can be changed into a phone, then eventually shapes and lines on a page can become words. Words are symbols that stand for very real things.

- A child writes “SV” on a paper and puts it on a block structure to let others know it is to be “saved.”
  - *What it means:* This child is paying attention to the sounds in words and letters, and is using writing to share ideas.

- A child tells a story about the princess in the block castle.
  - *What it means:* This child is using imagination and learning that stories have a beginning, middle, and end. If an adult will write down the story, the child learns that words we say can be put into writing.
SOCIAL SKILLS

Blocks are a tool for learning SOCIAL SKILLS! When playing with blocks, children can learn to:

- **Share**
  
  *There are enough blocks for you and your brother to both build something.*

- **Solve problems**
  
  *How can we both use these blocks and be firefighters?*

- **Recognize feelings**
  
  *It makes him angry when I tell him what to do.*

- **Work together**
  
  *How about if you are the firefighter and I’m the ambulance driver?*

- **Take turns**
  
  *You can have these when I’m done.*

- **Live with limits**
  
  *No throwing blocks. Keep the blocks in this area.*

- **Use self-control**
  
  *I know you really want to knock down that tower. You’re doing a good job of staying away from it.*

- **Making choices**
  
  *Do you want to play with LEGO’s or with the wooden blocks this morning?*
To encourage **SOCIAL SKILLS** in your child, use words such as:

<table>
<thead>
<tr>
<th>Share</th>
<th>Imagine</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take turns</td>
<td>Think</td>
<td>Encourage</td>
</tr>
<tr>
<td>Decide</td>
<td>Together</td>
<td>Respect</td>
</tr>
<tr>
<td>Listen</td>
<td>Feelings</td>
<td>Self-control</td>
</tr>
<tr>
<td>Wait</td>
<td>Happy</td>
<td>Patience</td>
</tr>
<tr>
<td>Start</td>
<td>Angry</td>
<td>Easy</td>
</tr>
<tr>
<td>Stop</td>
<td>Frustrated</td>
<td>Hard</td>
</tr>
<tr>
<td>Help</td>
<td>Afraid</td>
<td>Choice</td>
</tr>
<tr>
<td>Ask</td>
<td>Alone</td>
<td></td>
</tr>
<tr>
<td>Create</td>
<td>Friend</td>
<td></td>
</tr>
<tr>
<td>Pretend</td>
<td>Cooperate</td>
<td></td>
</tr>
</tbody>
</table>

**SOCIAL SKILLS** in action:

- A girl was playing with blocks and a boy sat down next to her and asked, “Can I play with you?” The girl responded, “No, these are my blocks!” The boy became quiet, obviously upset with her response. The girl pushed some of her blocks over to him and said, “Well, here. You can play with these.”

  ⇒ *What it means:* The boy showed he knew how to ask, rather than just take away toys. The girl responded to his hurt feelings and decided to share her blocks. They are both developing social skills.
Blocks are a tool for learning PHYSICAL SKILLS! When playing with blocks, children can learn:

- **Eye-hand coordination**
  
  *Stack these blocks up on top of each other.*

- **Small muscles skills**
  
  *Let’s pick up these blocks and put them in this bucket.*

- **Large muscle skills**
  
  *Bending, stretching, reaching, and walking when playing with blocks.*

- **Impulse control**
  
  *I like how you are controlling your hands so you don’t knock it over.*

- **Strength**
  
  *These are heavy! Can you carry them over there okay?*

- **Where their bodies are in comparison to the space around them.**
  
  *You walked around John’s blocks so carefully!*
To encourage **PHYSICAL SKILLS** in your child, use words such as:

- Stop
- Walk
- Touch
- Go
- Carry
- Strong
- Up
- Sit
- Gentle
- Down
- Bend
- Slow
- Balance
- Kneel
- Quick
- Stack
- Tiptoe
- Careful
- Move
- Reach
- Pick up
- Pass
- Hold
- Push
- Drop
- Pull

**PHYSICAL SKILLS** in action:

- The children were building a tall block tower. They had to bend over to pick up blocks, grab the blocks with their hands, and stretch to reach the top of the tower. They then walked very carefully around it so they would not knock it over.
  
  ⇒ *What it means:* These children are developing both large and small muscles and learning to control their bodies in space.

- Two boys sat on the floor, building a block road for their cars. They lined up their blocks end to end, making sure the edges touched. They then jumped back and forth over the road, laughing.
  
  ⇒ *What it means:* These children are using the small muscles in their fingers to carefully line up the blocks. Jumping uses large muscles, developing both strength and control.
1. Play more on the floor with the children. Watch the children as they build before adding gentle suggestions to help the play develop.

2. Tell the children what they can do with blocks rather than what they can’t do.
   - *The blocks stay on the table.*
   - *Take apart your tower with your hands.*
   - *The blocks are for building.*

3. TALK, TALK, TALK. Talk about what your child is doing. Talk about what you are doing. Describe what you see. Use interesting vocabulary.

4. Use open-ended questions to allow a child to explain a situation. Questions such as these encourage your child to think about what they’re doing and encourage them to talk about it:
   - *Tell me about your building.*
   - *What do you think the people are talking about in your house?*

   - *This is one way to build a gate. Will that work for your project?*

6. Vary the cleanup routines to involve children in the process.
   - Give the children a warning that cleanup time is coming.
   - *We can play for five minutes, and then we’ll clean*
Give the child a choice about how to accomplish the task.

Are you going to first put away the long blocks or the short blocks?

Join in with the child and make it a game.

Do you have strong muscles? Show me your muscles when you help pick up the blocks.

Sing a cleanup song together.

This is the way we pick up our toys,
Pick up our toys,
Pick up our toys,
This is the way we pick up our toys,
Before we go to bed.
STAGES OF BLOCK PLAY

STAGE 1. DISCOVERING BLOCKS
Children will explore individual blocks and their physical qualities by carrying, pushing, feeling, tasting, holding, and dropping them.

For more discoveries: Offer an assortment of block types and simple containers.

STAGE 2. STACKING BLOCKS
Children can stack blocks vertically or place them in a horizontal line. Beginning block builders often use a combination of stacking.

For more discoveries: Try a small assortment of the same type of blocks.

STAGE 3. COMPLEX STACKING
Children will combine vertical and horizontal stacks to create more complex patterns. Children may stack vertically and horizontally to make a three-dimensional structure with no interior space.

For more discoveries: Try providing pattern cards.

STAGE 4. MAKING ENCLOSURES WITH BLOCKS
Children will make enclosures flat on the floor. Children begin to name the construction while building or when it is completed.

For more discoveries: Offer toy farm animals, people, and cars.

STAGE 5. CREATING BRIDGES OR ARCHES WITH BLOCKS
Children will place a block that spans the space between two supporting blocks.

For more discoveries: Offer pictures of famous bridges or a piece of blue cloth and boats.
STAGE 6. COMBINING ENCLOSURES AND BRIDGES WITH BLOCKS
Children will make more complex buildings and use them as settings for dramatic play. Children also begin to share ideas and build cooperatively with others.

For more discoveries: Try supplying blank paper and pencils to make signs, or provide photographs of famous structures.

STAGE 7. BUILDING WITH PATTERNS AND SYMMETRY
Children will plan structures that have patterns and symmetry with details such as ramps and doors. They may do this cooperatively with other children.

For more discoveries: Give children color cubes or plants and photographs of famous paintings or buildings.

STAGE 8. BUILDING BLOCK STRUCTURES THAT REPRESENT OBJECTS FOR PRETEND PLAY
Children will plan and create structures in blocks and use them in role-playing situations. Buildings are often kept standing for several days.

For more discoveries: Try providing measuring tools, home-building magazines, and dress-up clothes.
Available resources include:

- **Cardboard Blocks**
  Knowledge Emporium, [www.knowledgeemporium.biz](http://www.knowledgeemporium.biz)

- **Foam Blocks and Color Cubes**
  Lakeshore Learning Materials, [www.lakeshorelearning.com](http://www.lakeshorelearning.com)

- **KEVA Planks**
  MindWare, [www.mindware.com](http://www.mindware.com)

- **Unit Blocks**
  Community Playthings, [www.communityplaythings.com](http://www.communityplaythings.com)

(This list is not an endorsement of retailers or manufacturers. It is simply a listing of available resources.)
Credits:
The University of Wisconsin-Extension Southern District Family Living colleagues contributing to the Block Party include:

- Bev Doll, Grant County
- Karen Ehle-Traastad, Vernon County
- Angie Flickinger, Rock County
- Patti Herman, Columbia County
- Kathy Hetzel, Dodge County
- Joan Laurion, Dane County
- Bridget Mouchon, Green County
- Sue Nagelkerk, Sauk County
- Peggy Olive, Richland County
- Jane Schaaf, Crawford County
- Ruth Schriefer, Iowa County
- Jenny Wehmeier, Walworth County

Special appreciation to:
Dave Riley, Child Development Specialist
UW-Extension Southern District Resource Management Team
An AA/EEO employer, University of Wisconsin-Madison, Division of Extension provides equal opportunities in employment and programming, including Title VI, Title IX and ADA requirements.