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In Partnership with the School of Education and Counseling,  
Purdue University Northwest



# Michigan Curriculum Guide

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## SAMPLE LETTER TO FAMILIES

Dear Families,

We have been playing a new game in our classroom, Blocks Rock! This competitive block-building activity helps children develop spatial thinking and mental rotation skills. Blocks Rock! encourages creative problem-solving, positive social interactions, and fun!

As your child's first teacher, you play an important role in modeling curiosity and persistence to support learning. At home you can create an environment where your child feels safe in taking risks, asking questions and making leaps in their thinking. Extend your child's experience with this game by asking about playing Blocks Rock!:

- o Tell me about the block game you played today.
- o Which friends played Blocks Rock! with you?
- o Tell me about what you built with the blocks.
- o Describe how you played the game? What did you use?

Blocks Rock! has been proven to help children develop important knowledge and skills in science, technology, engineering and mathematics (STEM). Playing this game with an adult or a classmate is another way that your child is learning essential concepts. If you are interested, you can purchase Blocks Rock! to play at home or you can download the app. Check out the Blocks Rock! website to learn more about this class favorite - <https://blocksrock.com/app>.

As always, thank you for sharing your child with us. Please don't hesitate to call or email with any questions.

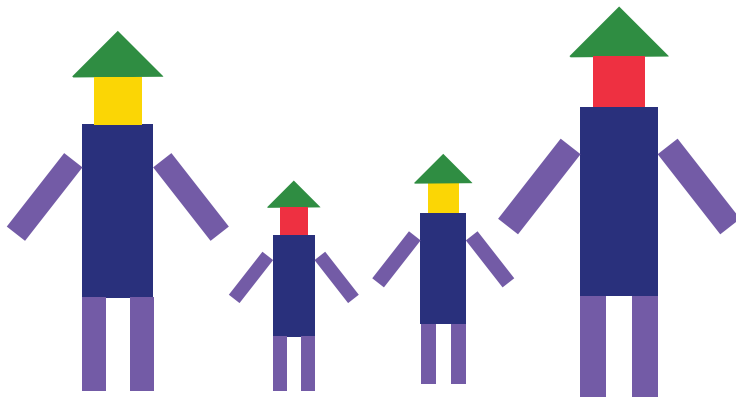
Sincerely,  
Your Name

## Sharing Information with Families

Communicating with families is an important way to connect home and school. Parents are the child's first teacher and when families feel as if they have meaningful interactions with school, they are more likely to stay involved. Helping families to understand their child's experience in your setting is an important step in developing a strong partnership with families.

Suggestions:

- Send a letter home explaining to families that you have been playing a new game and provide them with prompts to engage their child and to learn more about the game. See the sample letter.
- Host a family game night. Young children can learn about taking turns, following directions and sportsmanship when playing games with peers and adults.
- Share information about how to order the Blocks Rock! game for home. Or, provide instructions for downloading the app. To learn more, visit [blocksrock.com](http://blocksrock.com).



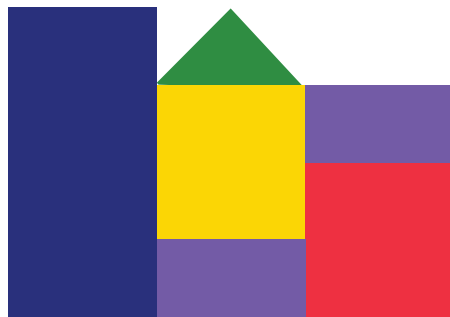
## Welcome to Blocks Rock!

Early childhood educators know that block play is a fundamental experience for young children. The “Block Corner” is a time-honored tradition in early learning environments as block play promotes young children's growth and learning in many ways – language development, mathematical understanding, curiosity, and friendships. Numerous research studies have shown the benefits of structured block play as part of a young child's classroom experience. Structured block play requires the ability to analyze a spatial representation and develops skills in estimation, measurement, patterning, part-whole relations, visualization, symmetry, transformation, and balance (Newman, et al., 2016).

**Blocks Rock!** is a competitive block-building activity that helps children develop spatial thinking and mental rotation skills. This brain development tool was created in 2005 as an educational resource to help children learn through play. This guide provides the rationale for using **Blocks Rock!** in your classroom and offers suggestions for implementing the game as well as enhancing the experience.

As an early childhood educator, you play a critical role in modeling curiosity and persistence to support young children's learning. Creating an environment where children feel safe in taking risks, asking questions and making leaps in their thinking is critical to their success. The competitive nature of this game motivates many children to continue playing the game. Use the **Blocks Rock!** game to encourage creativity in problem-solving, to promote positive social interactions, and to stretch children's thinking.

A word about competition and cooperation: In the early learning environment, educators may observe children engaged in “constructive competition” which is grounded in mutual respect and an understanding that other children possess desirable skills and competencies. Some children are motivated by the competitive aspects of playing the game. Others enjoy the cooperative nature of playing together. Often, the child with specific skills will teach the other children how to play the game and how to use strategies to win. While winning is very important to preschoolers, being friends and spending time with peers is even more important (Sheridan & Williams, 2006). Early childhood educators can support children’s cognitive and social-emotional development by focusing on both competition and cooperation.



	APL - Approaches to Learning	2CA - Creative Arts	LL - Language and Early Literacy Development	DLL – Dual Language Learning	SEP – Social, Emotional and Physical Health Development	M – Early Learning in Mathematics	S – Early Learning in Science	SS – Early Learning in Social Studies
Counting Rocks!	2, 4, 5, 6, 7, 8		3, 4	2, 5	1, 2, 3, 6, 7	1, 2, 3, 4, 5, 6, 7	1, 2	
Conversations	1, 2, 3, 6, 7, 8		3, 4, 6, 7	1, 2, 5	1, 2, 3	1, 2, 4, 6, 7		4
Dramatic Play	1, 2, 3, 4, 5, 6, 7, 8	3, 4	2, 3, 4, 5, 6, 7	1, 2, 3, 5	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7	1	2, 4
Freeze Dance	7	3	4	5	1, 2, 3, 4, 5, 7	4, 6		4
Monkey See Monkey Do	1, 4, 5, 6, 7		3, 4, 5	5	1, 2, 3, 6	1, 2, 3, 4, 5, 6, 7	2	
Copy Cat	4, 5, 6, 7	1	3, 5	5	1, 2, 3, 6	1, 2, 3, 4, 5, 6, 7	2	
Sign Up	4, 8		2, 3, 6, 7	4	1, 2, 3, 6	2, 4		4

Michigan Early Childhood Standards of Quality for Prekindergarten								
Activity	APL - Approaches to Learning	2CA - Creative Arts	LL - Language and Early Literacy Development	DLL - Dual Language Learning	SEP - Social, Emotional and Physical Health Development	M - Early Learning in Mathematics	S - Early Learning in Science	SS - Early Learning in Social Studies
BR! Structured block play with an adult.	1,2, 3,4, 5,6, 7, 8		3, 4, 5	1, 2	1, 2, 3, 6, 7	1, 2, 3, 4, 5, 6, 7	1	2,4
BR! Structured block play with a peer.	1, 2, 4, 5, 6, 7, 8		3, 4, 5, 7	1, 2, 5	1, 2, 3, 6, 7	1, 2, 3, 4, 5, 6, 7	1	2, 4
Free Exploration	1, 2, 3, 4, 5, 6, 7, 8	1, 4	3, 4, 6, 7	1, 2, 5	1, 2, 3, 4, 5, 6, 7	1, 2, 3, 4, 5, 6, 7	1, 2	2
Read Aloud	4		1, 2, 4, 5, 6, 7	1	1, 2, 3	2, 4, 7		2
Sort it Out	2, 4, 5, 6, 7, 8		3, 4	1, 5	1, 2, 3, 6, 7	1, 2, 3, 4, 5, 6, 7	1, 2	

## Overview of STEM Curriculum for Early Learning Environments

Early care and education programs are constructed around the concepts of STEM = Science, Technology, Engineering and Mathematics. Through the exploration of STEM concepts, young children increase conceptual knowledge and strengthen social and emotional skills, including executive function, all of which are critical for later school success. The learning environment, experiences and interactions with adults and peers are intentionally designed to promote growth and learning for children.

In a high-quality early learning environment, the key goals and outcomes include:

- Improving the child's social development skills - conversing with peers and adults, being independent, keeping hands to self, sharing and listening.
- Improving the child's cognitive skills. Ex: recognition of letters, pre-reading skills, concepts such as numbers and colors, book knowledge and vocabulary.
- Improving the child's executive function (promoting positive school behavior skills). Ex: turn-taking, manipulating materials, listening to a story, self-help skills.
- Improving parenting and family engagement practices – helping families learn how to observe their child in an educational environment, implementing at-home assignments and leading within the child's learning environment through classroom involvement.

These child outcomes align with the Indiana Department of Education's Academic Standards. The Indiana Early Learning Standards (Foundations to the Indiana Academic Standards) establish guidelines for early learners' development of foundational skills in the content areas as well as critical social-emotional competencies. Specifically, the Foundations which focus on STEM-specific learning and functions include:

- ▲ Early Reading: alphabet awareness, phonological awareness, concepts of print and comprehension.
- ▲ Numeracy: counting, cardinality, written numerals, quantity and comparison.
- ▲ Computation and Algebraic Thinking: mathematical structure and patterning.
- ▲ Data Analysis: classification, data collection, organization and description.
- ▲ Geometry: spatial relationships and space analysis.
- ▲ Sense of Self: self-awareness, confidence, identification and expression of emotions.
- ▲ Science: properties of objects, characteristics of living creatures and plants.
- ▲ Engineering: solving problems using the engineering design process.
- ▲ Self-Regulation: executive functions such as impulse control, planning and emotional regulation.
- ▲ Building Relationships: social development and engagement with others.
- ▲ Initiative and Exploration: initiative, self-direction, interest and curiosity as a learner.
- ▲ Attentiveness and Persistence: focus on a specific activity; persistence to complete tasks

**Notes:**





Early Learning in Science (S)		
Observation and Inquiry	1. Children develop positive attitudes and gain knowledge about science through observation and active play.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Dramatic Play
Living and Non-living Things	2. Children show a beginning awareness of scientific knowledge related to living and non-living things.	
Knowledge about the Earth	Children show a beginning awareness of scientific knowledge related to the earth.	
Early Learning in Social Studies (SS)		
Relationship in Place	1. Children begin to understand and interpret their relationship and place within their own environment.	
How People are Influenced	2. Children begin to recognize that many different influences shape people's thinking and behavior.	Playing BR! with a peer Free Exploration Read Aloud Dramatic Play
Understanding Time	3. Children show growth in their understanding of the concept of time and begin to realize that they are a part of a history, which includes people, places, events, and stories about the present and the past.	
Why We Have Rules and Laws	4. Children begin to learn about the reasons for rules and laws, the importance of a democratic process, and the responsibilities of being a member of a classroom, a family, and a community.	Playing BR! with a peer Conversations Dramatic Play Freeze Dance Sign Up
Basic Ideas about Economics	5. Children increase their understanding about how basic economic concepts relate to their lives.	
People and Their Environment	6. Children increase their understanding of the relationship between people and their environment and begin to recognize the importance of taking care of the resources in their environment.	

## Using Blocks in the Early Learning Environment

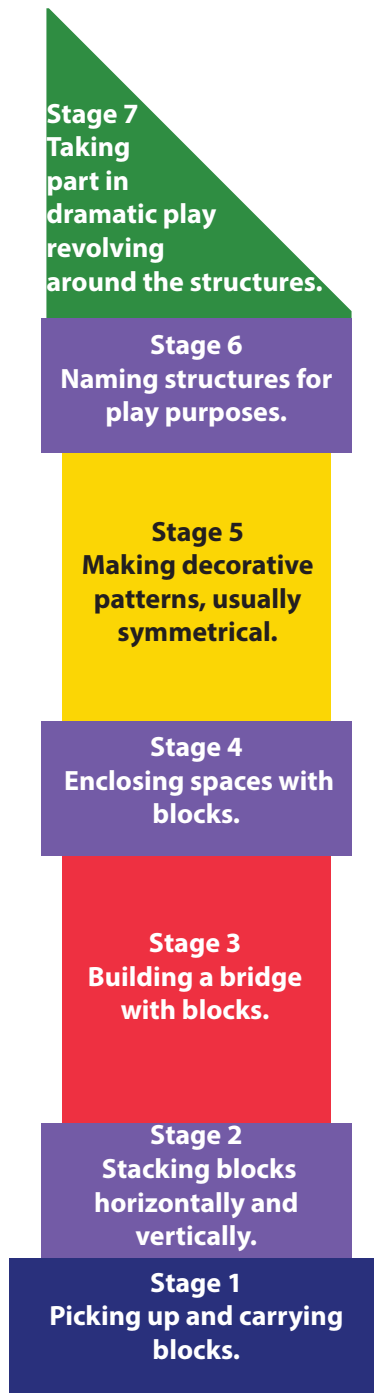
### Ten Things Young Children Learn from Block Play

Problem Solving  
 Imagination  
 Self-expression  
 Mathematics  
 Continuity and Permanence  
 Creativity  
 Science  
 Self-esteem  
 Social and Emotional Growth  
 Development in all areas

Source: National Association for the Education of Young Children



# Stages of Block Building



Early Learning in Mathematics (M)		
Classification and Patterns	3. Children begin to develop skills of recognizing, comparing and classifying objects, relationships, events and patterns in their environment and in everyday life.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Dramatic Play Monkey See Copy Cat
Counting and Cardinality	4. Children extend their understanding of numbers and their relationship to one another and things in the environment.	Playing BR! with a peer Free Exploration Read Aloud Sort it Out Counting Rocks Conversations Dramatic Play Freeze Dance Monkey See Copy Cat Sign Up
Simple Operations and Beginning Algebraic Thinking	5. Children begin to develop skills of sorting and organizing information, seeing patterns, and using information to make predictions and solve new problems.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Dramatic Play Monkey See Copy Cat
Measuring	6. Children explore and discover simple ways to measure.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play Freeze Dance Monkey See Copy Cat
Geometry	7. Children build their visual thinking skills through exploration with shape and the spaces in their classrooms and neighborhoods.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play Freeze Dance Monkey See Copy Cat

Social, Emotional and Physical Health and Development (SEP)		
Physical Development	6. Fine Motor Development. Children experience growth in fine motor development and use small muscles to improve a variety of fine motor skills in a variety of both structured and unstructured and planned settings.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Dramatic Play Monkey See Copy Cat Sign Up
	7. Positive Activity. Children participate in activities that encourage self-motivation, emphasize cooperation, and minimize competition.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Dramatic Play Freeze Dance
Health, Safety and Nutrition	8. Healthy Eating. Children become aware of and begin to develop nutritional habits that contribute to good health.	
	9. Healthy Choices. Children begin to have knowledge about and make age-appropriate healthy choices in daily life.	
	10. Personal Safety. Children recognize that they have a role in preventing accidents or potential emergencies.	
Early Learning in Mathematics (M)		
Math Practice	1. Children begin to develop processes and strategies for solving mathematical problems.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play Monkey See Copy Cat
Mathematical Literacy	2. Children begin to use the language of mathematics by applying emerging skills in representing, discussing, reading, writing, and listening.	Playing BR! with a peer Free Exploration Read Aloud Sort it Out Counting Rocks Conversations Dramatic Play Monkey See Copy Cat Sign Up

Researchers have long studied the positive contribution of block play to development and have empirically identified the increasingly complex stages of block play in children.

When young children play the **Blocks Rock!** game, they often demonstrate many of these stages. In a study completed at The Indianapolis Children's Museum, children ages 3 – 5 years old who played **Blocks Rock!** were observed picking up and carrying blocks (Stage 1), stacking blocks (Stage 2), building bridges (Stage 3), and making symmetrical, decorative patterns with the blocks (Stage 5). Young children were more likely to continue playing the game if an adult engaged with them as they played.

Source: Wolf, 2011



## Playing the Game

The **Blocks Rock!** game has a set of cards; two identical sets of blocks of varying shape, size, colors; and a bell. Each player has a set of blocks, and one player turns over a card during play that has a particular structure, point value, and how to build the structure (e.g., up or flat on the table). The complexity of the structure increases during play. Each player attempts to build the structure as fast as possible with the player who does so correctly first and rings the bell being awarded the points displayed on the card. The score is kept and once all cards have been played the winner is the player with more points or cards.

Helping young children to be ready for **Blocks Rock!** includes several opportunities for the exploration of the game. To do this, select a low-traffic area for guided explorations of the game materials. In this space, sit down with a child and place the same number, color, and shape of blocks in front of both of you. Be sure to have the bell handy, so that this can be practiced as well. Begin by stacking your blocks on top of each other, and ask the child to do the same. Even though in **Blocks Rock!** children will be asked to organize the blocks horizontally, begin with vertical stacking to capitalize upon children’s natural inclination to build vertically. Once the child has built the tower, let them ring the bell.

After you have practiced building towers and ringing the bell, you will want to move to demonstrating how towers can be built on their sides (horizontally). As you place blocks in a predictable sequence (e.g., red-red-blue, blue-red-blue, etc.) horizontally in front of you, be sure to talk about what you are doing. Ask the child to create the sequence with their blocks as you are building yours. When they have completed the pattern, let them ring the bell. Once they are able to match your pattern, ask them to create a pattern for you to make and ring the bell.

Technology Literacy – Early Learning in Technology (TL)		
<i>The Technology Literacy Standards may be addressed with the Blocks Rock! app available from the App Store and Google Play Store. The free app comes with 28 new structures to foster spatial learning. Each player needs a complete set of 24 blocks to play with the app and two players can compete side-by-side using the same tablet. Interacting with the technology to play Blocks Rock! is most effective when supported by an attentive adult.</i>		
Critical Thinking, Problem Solving, and Decision Making	4. Children can explain some ways that technology can be used to solve some problems.	
Digital Citizenship	5. Children begin to understand how technology can be used appropriately or inappropriately.	
Technology and Concepts	6. Children begin to learn to use and talk about technology tools appropriately.	
Social, Emotional and Physical Health and Development (SEP)		
Social Emotional Development and Health	1. <b>Understanding of Self.</b> Children develop and exhibit a healthy sense of self.	Playing BR! with a peer Free Exploration Read Aloud Sort it Out Counting Rocks Conversations Dramatic Play Freeze Dance Monkey See Copy Cat Sign Up
	2. <b>Expressing Emotions.</b> Children show increasing ability to regulate how they express their emotions.	
	3. <b>Relationships with Others.</b> Children develop healthy relationships with other children and adults.	
Physical Development	4. <b>Body Control and Activity.</b> Children increase their ability to understand and control their bodies and learn that regular physical activity can enhance their overall physical, social, and mental health.	
	5. <b>Gross Motor Development.</b> Children experience growth in gross motor development and use large muscles to improve a variety of gross motor skills in a variety of both structured and unstructured and planned and spontaneous settings.	

Dual Language Learning (DLL)		
Receptive English Language Skills	1. Children demonstrate an increasing ability to comprehend or understand the English language at an appropriate developmental level.	Playing BR! with a peer Free Exploration Read Aloud Conversations Dramatic Play
Expressive English Language Skills	2. Children demonstrate an increasing ability to speak or use English at an appropriate developmental level.	Playing BR! with a peer Free Exploration Counting Rocks Conversations Dramatic Play
Engagement in English Literacy Activities	3. Children demonstrate increased understanding and response to books, storytelling, and songs presented in English and increased participation in English literacy activities.	
Engagement in Writing	4. Children demonstrate an increasing ability to write words or engage in early stages of writing in English.	
Social Interaction	5. Children interact with peers in play, classroom and social situations using English with an increasing ability and comfort; use first language when appropriate and share home culture.	
Technology Literacy – Early Learning in Technology (TL)		
<i>The Technology Literacy Standards may be addressed with the Blocks Rock! app available from the App Store and Google Play Store. The free app comes with 28 new structures to foster spatial learning. Each player needs a complete set of 24 blocks to play with the app and two players can compete side-by-side using the same tablet. Interacting with the technology to play Blocks Rock! is most effective when supported by an attentive adult.</i>		
Creativity and Innovation	1. Children use a variety of developmentally appropriate digital tools to learn and create.	
Communication and Collaboration	2. Children work together when using developmentally appropriate digital tools.	
Research and Information Literacy	3. With adult support and supervision, children interact with developmentally appropriate Internet-based resources. With adult support children use a variety of developmentally appropriate digital resources to locate and use information relating to a topic under study.	

Now that you have practiced building, it's time to introduce the cards included in the **Blocks Rock!** game. You will want to be strategic here in which cards you begin with (i.e., structures made of four – five blocks are where to begin), and you will want to ensure that both you and the child have the number, shape and size of blocks necessary to build the structure represented on the card. Demonstrate how to construct the structure. As you build, ask the child to make the structure as well. Be sure to use the names of shapes, the color of those shapes, as well as how they relate to the other shapes being used in the structure (e.g., You might say, "Next to my green triangle, I'll put my red square. Can you place your red square next to your green triangle?"). Once the structure is built, ask the child to ring the bell. It is important to remember in this step of the exploratory phase that many attempts and practices will be needed before being able to move forward. To be successful here requires the child to integrate many concepts (i.e., shape rotation, motor skills, hand-eye coordination, and spatial reasoning), to create a plan, and to take turns with another player (you), all things that may be difficult at times.

As children become more competent in building from the templates (i.e., the cards) found in the **Blocks Rock!** game, you will want to introduce the final component to the game...speed. When selecting the cards from which the next structure is to be built, add the idea of being fast at building. To do this, start by looking at the card together and selecting the appropriate blocks to use. Once you both have your blocks picked out, verbalize the steps you will take in putting your structure together (e.g., You might say while pointing to the shapes on the card, "First, I'll put my green triangle here. Then, I'll place my red square below it. Finally, I'll put by blue rectangle under the red square."). Don't expect the child to verbalize their thinking, but model it for them. After you've verbalized your process, ask the child to create the structure. When the structure is made, let them ring the bell.

For young children, three- and four-year-olds, **Blocks Rock!** is a game that they will play with an adult. Typically, these will be one-on-one interactions within a quiet, low-traffic space in the classroom that allows for concentrated efforts to occur. However, this game, once introduced in your classroom, is something that children and parents can play together. Using the **Blocks Rock!** game as a means of guided construction play will help children develop the capacity to rotate and analyze shapes (spatial visualization); the ability to shift focus from one stimulus to another (cognitive flexibility); the aptitude to solve problems in a variety of ways; and the competence to increase language use as they engage in conversations about their building.



Language and Early Literacy Development (LL)		
Emergent Reading	1. Children begin to understand written language read to them from a variety of meaningful materials, use reading-like behaviors, and make progress toward becoming conventional readers.	
Writing Skills	2. Children begin to develop writing skills to communicate and express themselves effectively for a variety of purposes.	
Spoken Language	3. Expressive. Children develop abilities to express themselves clearly and communicate ideas to others.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play Monkey See Copy Cat
	4. Receptive. Children grow in their capacity to use effective listening skills and understand what is said to them.	Playing BR! with a peer Free Exploration Read Aloud Sort it Out Counting Rocks Conversations Dramatic Play Freeze Dance Monkey See
Viewing Images and Other Media Materials.	5. Children begin to develop strategies that assist them in viewing a variety of images and multimedia materials effectively and critically.	Playing BR! with a peer Read Aloud Dramatic Play Monkey See Copy Cat
Positive Attitudes about Literacy	6. Children develop positive attitudes about themselves as literate beings – as readers, writers, speakers, viewers, and listeners.	
Diversity of Communication	7. Children begin to understand that communication is diverse and that people communicate in a variety of ways.	



Approaches to Learning (APL)		
Social Dispositions	6. Participation-Cooperation-Play-Networking-Contribution: Demonstrate increasing ability to be together with others, in play or intellectual learning opportunities and/or making positive efforts for the good of all; join a community of learners in person and digitally as appropriate.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play Monkey See Copy Cat
	7. Respect for Self and Others – Mental and Behavioral Health: Children exhibit growing regard for one’s mind and capacity to learn; demonstrate the capacity of consideration for others; show a growing capacity to self-regulate and demonstrate self-efficacy.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play Freeze Dance Monkey See Copy Cat
	8. Responsibility-Ethical Actions. Children are becoming accountable or reliable for their actions to self and others.	Playing BR! with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play Sign Up
Creative Arts (CA)		
Visual Arts	1. Children show how they feel, what they think, and what they are learning through experiences in the visual arts.	
Instrumental and Vocal Music	2. Children show how they feel, what they think, and what they are learning through listening, participating in, and creating instrumental and vocal music experiences.	
Movement and Dance	3. Children show how they feel, what they think, and what they are learning through movement and dance experiences.	
Dramatic Play	4. Children show how they feel, what they think, and what they are learning through dramatic play.	
Aesthetic Appreciation	5. Children develop rich and rewarding aesthetic lives.	

## Materials and Props to Enhance Block Play

The block corner is a powerful arena for children’s learning. Consider incorporating a variety of materials into the block corner to encourage children’s creativity, spatial reasoning and imagination. The **Blocks Rock!** materials can be housed in the block corner for easy access.

environmental signs  
 dress up clothes  
 blueprint paper  
 tape measures  
 wood cookies figurines  
 flat boulders mirrors containers  
 mats rulers  
 cars pallets tree stumps  
 vehicles tires pencils slow tables  
 trucks photos loose parts  
 items from nature  
 labels shoe boxes  
 wooden spools  
 clipboards  
 cardboard tubes  
 fabric pieces  
**Blocks Rock! game**

## Activities to Extend Blocks Rock!

In addition to the structured competitive game, *Blocks Rock!* offers endless possibilities for learning. Early childhood educators can use the materials from *Blocks Rock!* to introduce new concepts, reinforce learning, and encourage innovation and creativity in thinking. Educators can structure activities during free play, as center activities or in small groups with guided instruction.

### Read Aloud



Introduce STEM concepts by reading aloud picture books (see list). Use vocabulary related to building and problem-solving to give children a foundation in the language of STEM. Prompt discussion with questions to foster comprehension and predictions.



## Michigan Early Childhood Standards of Quality for Prekindergarten

Domain/ Sub Domain	Early Learning Expectation Key Goals addressed by the structured play with <i>Blocks Rock!</i> are red.	Suggested Activities
<b>Approaches to Learning (APL)</b>		
Habits of Mind	1. Creativity-Imagination-Visualization: Children demonstrate a growing ability to use originality or vision when approaching learning; use imagination, show ability to visualize a solution or new concept.	Playing <i>BR!</i> with a peer Free Exploration Conversations Dramatic Play Monkey See
	2. Initiative-Engagement-Persistence-Attentiveness. Children demonstrate the quality of showing interest in learning; pursue learning independently.	Playing <i>BR!</i> with a peer Free Exploration Sort it Out Counting Rocks Conversations Dramatic Play
	3. Curiosity-Inquiry-Questioning-Tinkering-Risk Taking. Children demonstrate an interest and eagerness in seeking information.	Free Exploration Conversations Dramatic Play
	4. Resilience-Optimism-Confidence: Children demonstrate the capacity to cope with change, persist, move ahead with spirit, vitality and a growing belief in one's ability to realize a goal.	Playing <i>BR!</i> with a peer Free Exploration Read Aloud Sort it Out Counting Rocks Dramatic Play Monkey See Copy Cat Sign Up
	5. Reasoning-Problem Solving-Reflection: Children demonstrate a growing capacity to make meaning, using one's habits of mind to find a solution or figure something out.	Playing <i>BR!</i> with a peer Free Exploration Sort it Out Counting Rocks Dramatic Play Monkey See Copy Cat



## Children's Literature Related to **Blocks Rock!**

### Thinking Like a **S**cientist

- Beaty, A. and Roberts, D. (2016). *Ada Twist, Scientist*. Abrams Books for Young Readers.  
Murray, D. (2016). *City Shapes*. Little, Brown.  
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### Using **T**echnology

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### Free Exploration

Allow children to use the materials independently. This provides the child opportunity to explore all facets of the materials, to construct an understanding of the physical properties of the blocks, to practice using the bell, and to develop confidence using the materials.



### Counting Rocks!



Model 1:1 correspondence, counting, grouping, count sets of items, compare sets – use words such as more, fewer.

### Conversations:

Use the playing cards to start conversations, talk about the designs, use concept words – on top of, below, next to, more than, etc.



## Let's Play



Observe how children use the blocks as symbolic representations of items in their dramatic play. For example, using the rectangular blue block and pretending to make a phone call on a mobile phone

## Sign Up

Demonstrate how to make a sign-up sheet for children to take turns using the Blocks Rock! Game. Encourage children to create their own lists to track who has the next turn.



## Freeze Dance

Use the bell as a signal for children to "Freeze" when dancing to music.



## Copy Cat

Show children how to use the larger play mat with the block designs to replicate, either by placing blocks directly onto the mat, or next to the mat.



## Monkey See, Monkey Do



Invite children to copy or extend a pattern (ABAB or ABCABC) that you have created with movements (ex: clap, stomp, clap, stomp) and then use the blocks to create patterns for children to extend or copy.

## Sort it Out

Encourage children to classify the blocks into different categories, focusing on the physical properties such as color, shape, size.

