

# Notch Blocks

## *Engaging Children in a Fully Integrated Block Building Experience*

By: Cindy Gennarelli M.Ed., Director, Early Childhood Education Innovation

William Paterson University

Wooden block building materials are a fundamental and natural manipulative used by children worldwide. Notch Blocks support extensive National Association of Education for Young Children (NAEYC) research validating developmentally appropriate educational advantages for young children interacting with high-quality wooden block building materials. These learning opportunities are aligned with STEM concepts, (Science, Technology, Engineering, and Mathematics), the 21st-century learning framework, and related skills including creativity, communication, critical thinking, and collaboration (4C's).

While exploring with Notch Blocks (both indoors and outdoors), children have opportunities to engage in open-ended, active learning building opportunities. They formulate hypotheses, test theories, and make discoveries that help them develop a fundamental understanding of the structural design process. Additionally, they begin to experiment with different orientations of blocks that spark curiosity and heighten their creative capacities.

These open-ended building opportunities promote independence, innovative thinkers, and flexible problem solvers. For example, as part of the design process, children begin engaging in engineering and architectural behaviors, building with intentionality and purpose. They take initiative and think deliberately about their choices; they show persistence designing, refining, and critically rethinking their iterations.

Children's interactions with Notch Blocks are instinctive and organic; therefore, children should always be the decision makers when building. Some children may begin by stacking blocks vertically, others may build horizontally; however, all building opportunities should be validated. They rely on their prior knowledge and experiences from what they know about their environment and when given the freedom to build without predetermined outcomes, children will attend to building more intentionally. Individual and authentic structures will emerge, ones that will reflect the child's individual and unique environmental experiences.

These open-ended play-based learning experiences provide opportunities for math and science learning to occur and extend cognitive thinking skills. As they manipulate three-dimensional shapes, they heighten their

visual-spatial perspective, knowledge, and skills including geometry and directionality. When they navigate through the building process, they begin to grasp the underlying fundamental understanding of physics: creating strong, stable foundations, ramps, pathways, tunnels, and bridges that include force and motion.

It is crucial to consider our role as adults. How can we facilitate their Notch Blocks System building without disrupting their building process? We can do this and extend learning in a variety of ways that include the types of questions and conversations we have with children during their building process. Engage children in higher level, open-ended, meaningful conversations that support their work but doesn't interrupt their play. Ask questions that provide opportunities for children to articulate their new learnings. For example:

- I wonder what would happen if...
- I am curious...
- I notice that you ...

Introduce new vocabulary in a purposeful and meaningful way.

- What can you tell me about the geometric pattern (angles, slants) ....
- Your structure has quite a sturdy foundation...
- Your building is very stable...
- How many stories tall...

*Notch Blocks provide opportunities for children to explore and investigate with materials when provocations emerge from their own interests and curiosities.*



# Care

Notch Blocks are made of FSC certified eucalyptus wood and will weather to a soft gray color if used outdoors. Blocks feature smooth sanded edges and notches that lock together, allowing for big structures and endless building possibilities. With blocks of varying shapes and sizes, there are plenty to share, encouraging group participation. Ages 3+.  
Smallest block measures 6"L x 3"W.  
Largest block measures 30"L x 3"W.

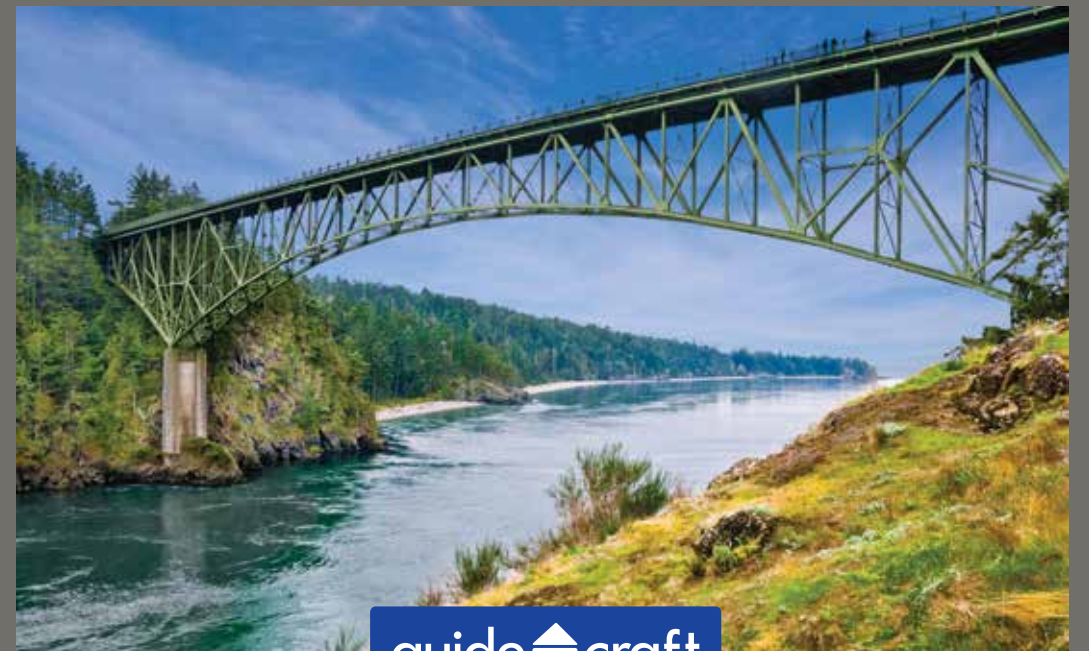
**Care Instructions:** Notch Blocks are for use indoors or outdoors, but should be stored in a dry, covered setting when not in use. Repeated exposure to water and sunlight will cause splitting and cracking. Blocks do not have a finish, allowing the natural grain to be the point of contact by children when building, enhancing their experience with natural materials. If the grain raises, use light-grade sandpaper to bring back the original, smooth sanded feeling.

**Warranty:** Notch Blocks are warranted to be free from defects in material and craftsmanship for a period of three (3) years. This warranty does not apply to damage caused by abuse, misuse, improper care or altered product. This warrant is provided to the original purchaser with proof of purchase, and is non-transferable. The manufacturer's liability under this warranty is limited to the repair or replacement of the defective product, at the manufacturer's sole option. This express, limited warranty is granted in lieu of all other warranties. For information on warranty claims, contact the retailer from whom you purchased the product.



▲  
Notch Blocks Storage Cart sold separately.



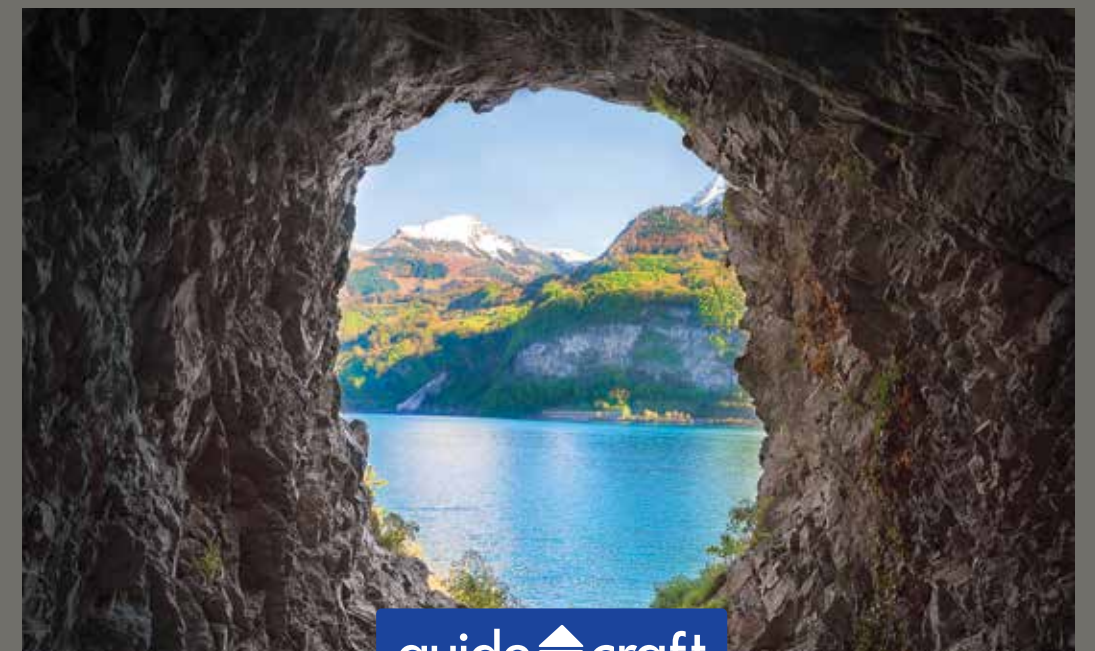
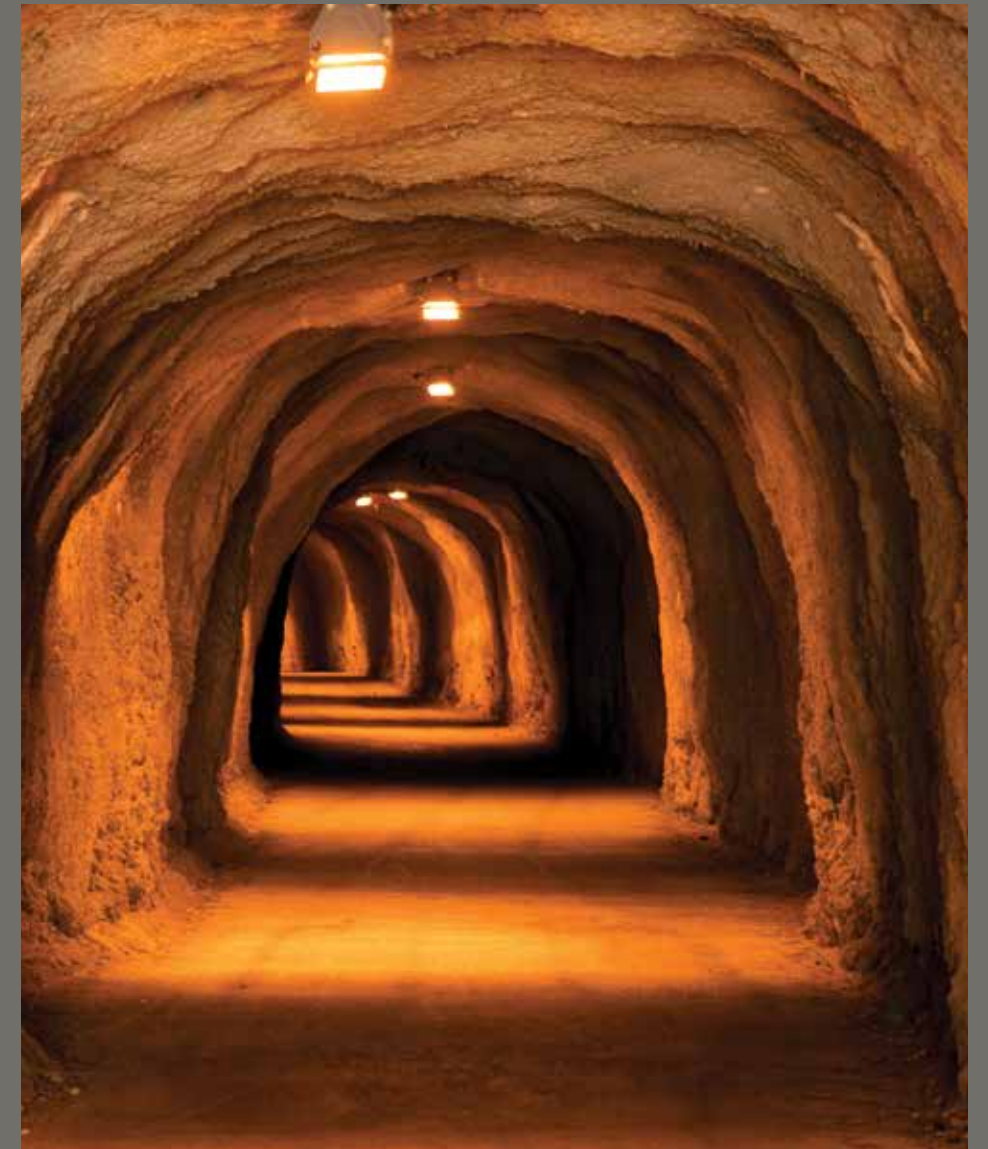


# Bridge

Related words:

support, span, over, under, engineering, load





# Tunnel

Related words:

bore, passage, light, dark, subterranean, burrow





# Street

Related words:

city, maze, path, passage, community, intersection, join







# Community

Related words:  
city, neighbor, helping, people,  
communicate





# Construction

Related words:

build, balance, measure, frame, teamwork,  
design, material



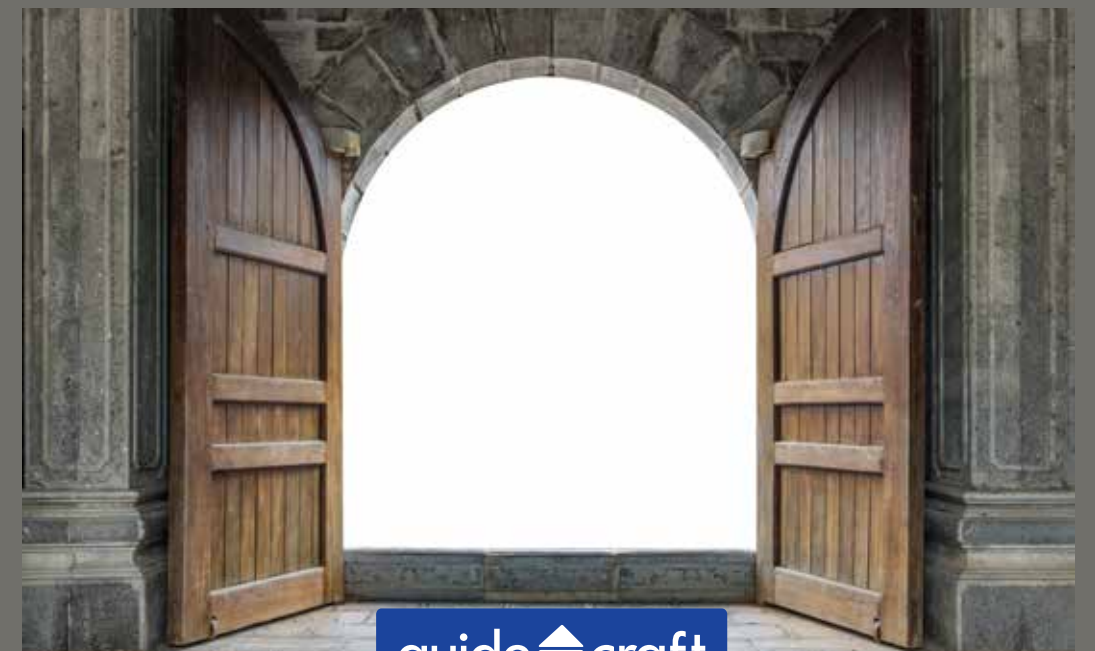
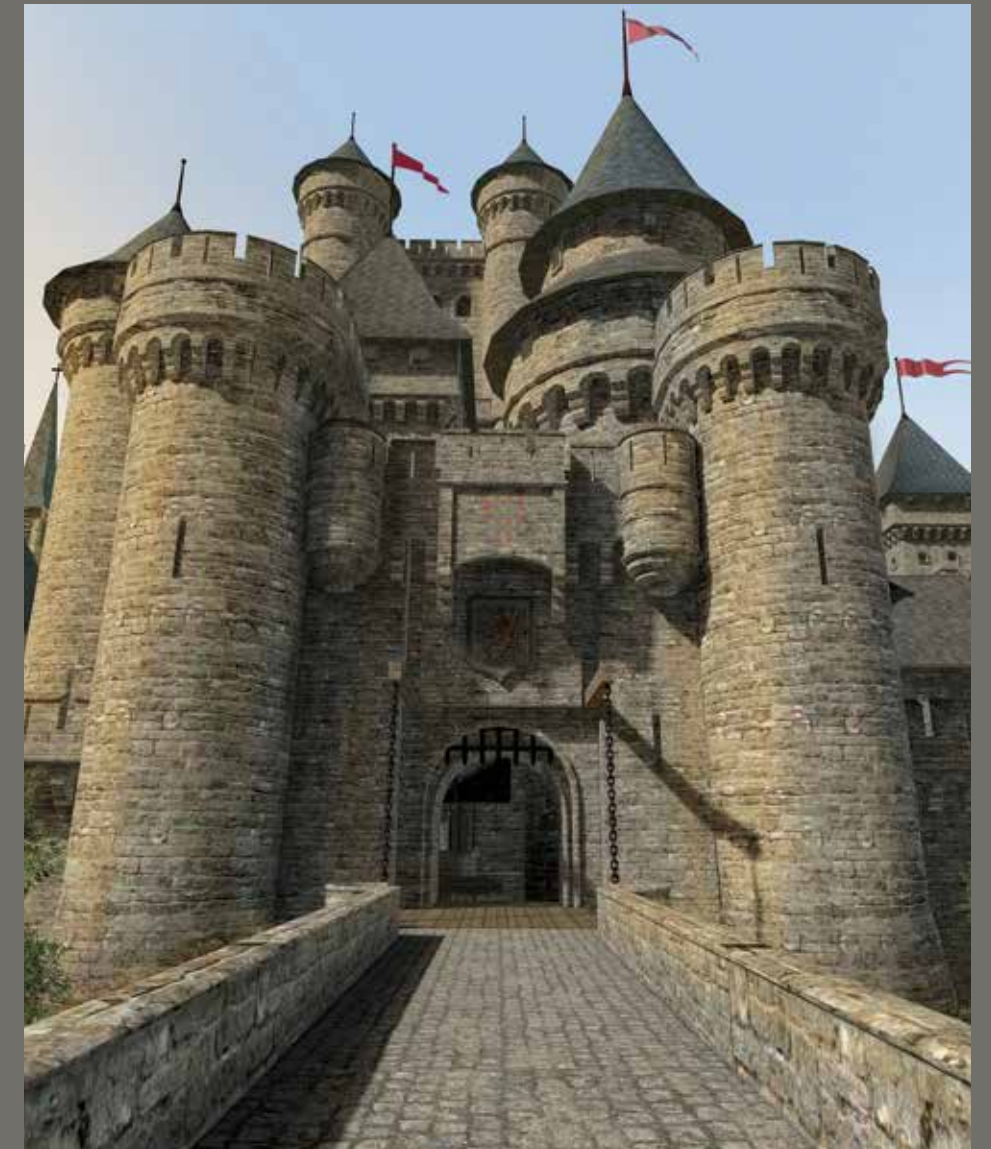


House

Related words:

window, wall, neighborhood, community,  
town, shelter, room, roof





Castle

Related words:  
drawbridge, wall, turrets, gate, towers







# Transportation

Related words:  
vehicle, motor, axle, movement,  
passenger, journey





# Nature

Related words:

animals, flora, fauna, earth, environment, explore





# Pattern

Related words:

repetition, light, shadow, rhythm, shape, symmetry

