Block Play: Foundations for learning

Blocks, puzzles, and shape games teach ways of seeing the world that are foundational to success in science, mathematics, and engineering.

“Play is the highest form of research.”
~Albert Einstein

Block play teaches:

★ How things are made of **parts**

★ How a **series of steps** in order can make complicated things (LEGOs, algorithms)

★ **Transformations**: a cone is a hat or the bottom of an ice cream cone

How to play:

★ Free play, finding missing pieces, comparing and categorizing pieces, and copying a construction all teach important skills

★ Parent talk that **labels** relations “on,” “in,” “beside,” “next to,” increase spatial reasoning skills and readiness for school
Block play changes with development:

<table>
<thead>
<tr>
<th>Early:</th>
<th>Later:</th>
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</thead>
<tbody>
<tr>
<td>Comparing objects by banging &amp; holding</td>
<td>Making enclosures</td>
</tr>
<tr>
<td>Putting objects into containers</td>
<td>Making bridges</td>
</tr>
<tr>
<td>Stacking</td>
<td>Making structures for pretend play</td>
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</tbody>
</table>

**Remember:**

There is no need to teach, no right or wrong, just jointly play, create, and talk about the spatial relations and shapes as you make wonderful things!

**Websites:**

National Association for the Education of Young Children

- [https://www.naeyc.org/resources/blog/what-research-tells-us-about-block-play-and-stem-learning](https://www.naeyc.org/resources/blog/what-research-tells-us-about-block-play-and-stem-learning)

First Things First


**Scholarly references:**


To learn more about the Cognitive Development Lab and learn how you can sign your child up to be a “Child Scientist,” visit [https://cogdev.lab.indiana.edu](https://cogdev.lab.indiana.edu) or scan the QR code.