

Family Building Basics



Thanks to all the parents who participated in our Staff / Parent Discussion on Friday, January 28th. We enjoyed experimenting with varied building materials from our classrooms, as well as with everyday materials that could be re-purposed for building. We also discussed the developmental benefits of block building, along with the levels of block play, and then we watched recent video clips from our 3's, 4's, and kindergarten classes to see the development in action! In case you missed the discussion, here are a few of the key points, along with some photos of our experience.

Developmental Benefits of Block Building

- **Self-Esteem & Independence** – developing confidence in mastering diverse materials, taking responsibility for following the rules and cleaning up the space, managing emotions when structures fall, etc.
- **Interaction & Cooperation** – sharing materials, coordinating actions, negotiating cooperative designs, etc.
- **Communication** – learning new vocabulary, discussing plans, writing labels or drawing blueprints, reenacting stories, etc.
- **Discovery & Exploration** – exploring concepts of gravity as they relate to balance and stability, counting and measuring building features, strengthening geometric concepts and spatial skills, discovering multiple solutions to building problems, appreciating the value of learning from “mistakes”, etc.
- **Physical Capabilities / Health & Safety** – strengthening eye-hand coordination, building strength to handle large blocks, managing body movements to avoid bumping structures, following safety procedures with blocks, etc.
- **Artistic Expression & Appreciation** – experimenting with design & decoration while combining shapes, colors, textures, noticing varied features of buildings, replicating structure from designs, imagining new constructions, etc.



Levels of Block Play: Children typically progress during the early childhood years from carrying and otherwise exploring blocks, to building mostly in rows (either horizontal or vertical), to bridging spaces, to enclosing spaces, to making decorative patterns, to naming structures that they build intentionally (e.g., saying they're making a zoo), to symbolizing known buildings with blocks.

Adult Support For Block Building

- Build **WITH the children** to gently support their developmental progression without directing or frustrating them.
- Take the **child's lead**, follow the child's interest, and provide only the level of support they need.
- Add people, animals, vehicles, etc. to the selection of blocks to **extend the play**.
- Allow children to combine a **variety of blocks**.
- Allow children to continue working on a structure for a **period of days**.
- Encourage children to **disassemble buildings as they assemble them** – one block at a time (i.e., rather than knocking or kicking them down).

Architecture Pointers for Families

As we begin the Whole School Building Unit, we encourage families to explore the architecture of your own homes and the buildings within our community. We will be exploring the Carnegie Mellon campus buildings during school hours.



ArchKIDecture is an independent architecture education project that encourages children to explore and participate in the built environment. The web site www.archkitecture.org offers a variety of interesting facts, stories, and related images that might be worth exploring on a snowy day.

For example, the site has a whole section for learning about materials used in architecture. In addition to introducing materials as “the substances that are selected by the architects and used by the builders to create the structure”, four key principles of materials are listed:

- **Materials give the building structural soundness.**
- **Materials provide shelter from the elements.**
- **Materials should be pleasing to view.**
- **Materials must be within the budget for the building.**

Children can then click to learn more about steel & glass, brick, straw & thatch, wood, and stone materials used in buildings. You can read to your children about these materials as they relate to stories, such as the Three Little Pigs, to new vocabulary (e.g., mason), and to famous buildings around the world (e.g., the pyramids).



There's also a fun section called “Wild and Wacky Structures” where you can see famous buildings like the Eiffel Tower in Paris, France (1889, Gustave Eiffel). It also includes this amazing Tin Can Building in Lesotho (2002, Michael Hones). “A German man moved to Lesotho in Africa and wanted to do something positive for the people there. He realized that the tin cans were a great resource that was available and not used for anything once people had drunk up the beverage. So, he decided to start by making ‘solar cookers’ using the sun to make heat for cooking out of the cans. Then he started to design buildings out of the cans.” What a great example of RECYCLING!!

