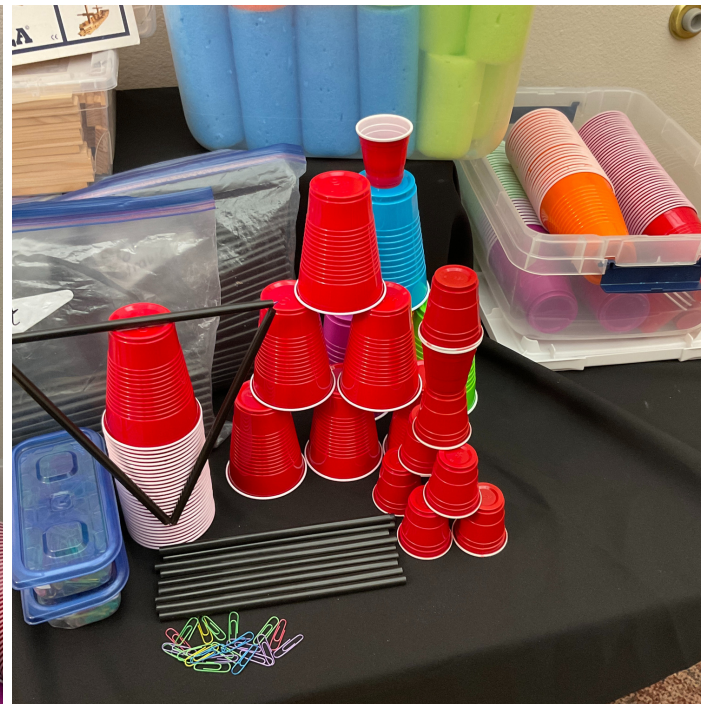


Architects Delight



This kit teaches about structures and how to build them! Participants can explore the idea of building structures in multiples ways through a variety of materials.



INVENTORY OF TRUNK

Architect's Delight

IN	OUT
	<u>Activity Binder</u>
<input type="checkbox"/>	<input type="checkbox"/> Librarian Instructions
<input type="checkbox"/>	<input type="checkbox"/> Inventory Sheet
<input type="checkbox"/>	<input type="checkbox"/> Booklist/Introduction
<input type="checkbox"/>	<input type="checkbox"/> Pictures of trunk organization
<input type="checkbox"/>	<input type="checkbox"/> Kapla Block Building Activity Guide
<input type="checkbox"/>	<input type="checkbox"/> Cup Construction Activity Guide
<input type="checkbox"/>	<input type="checkbox"/> Skeleton Frame Built out of Straws Activity Guide
<input type="checkbox"/>	<input type="checkbox"/> Building a Skyscraper with Discs and Rods Activity Guide
<input type="checkbox"/>	<input type="checkbox"/> Consumables list
<input type="checkbox"/>	<input type="checkbox"/> Architect Delight Supplement
<input type="checkbox"/>	<input type="checkbox"/> <i>What Words to Use?</i>
<input type="checkbox"/>	<input type="checkbox"/> <i>Blocks</i>
<input type="checkbox"/>	<input type="checkbox"/> <i>The Geometric World of Young Children</i>
<input type="checkbox"/>	<input type="checkbox"/> <i>Let's Invent!</i>
<input type="checkbox"/>	<input type="checkbox"/> <i>Toy Blocks and construction toys: A Guide for the science-minded</i>
<input type="checkbox"/>	<input type="checkbox"/> <i>The Right question at the right time</i>
<input type="checkbox"/>	<input type="checkbox"/> <i>Help Your Child Develop Early Math Skills</i>
<input type="checkbox"/>	<input type="checkbox"/> Parent surveys
<input type="checkbox"/>	<input type="checkbox"/> 4 laminated activity sheets
	<u>Books</u>
<input type="checkbox"/>	<input type="checkbox"/> <i>A City Through Time</i> by Philip Steele
<input type="checkbox"/>	<input type="checkbox"/> <i>Angelo</i> by David Macaulay
<input type="checkbox"/>	<input type="checkbox"/> <i>Block City</i> by Robert Louis Stevenson
<input type="checkbox"/>	<input type="checkbox"/> <i>Building a House</i> by Byron Barton
<input type="checkbox"/>	<input type="checkbox"/> <i>Dreaming Up: A Celebration of Building</i> by Christy Hale
<input type="checkbox"/>	<input type="checkbox"/> <i>How a House is Built</i> by Gail Gibbons
<input type="checkbox"/>	<input type="checkbox"/> <i>If You Lived Here: Houses of the World</i> by Giles Laroche
<input type="checkbox"/>	<input type="checkbox"/> <i>Leonardo and the Flying Boy</i> by Laurence Anholt
<input type="checkbox"/>	<input type="checkbox"/> <i>Mike Mulligan and His Steam Shovel</i> by Virginia Burton
<input type="checkbox"/>	<input type="checkbox"/> <i>Sky Boys: How they Built the Empire State Building</i> by Deborah

- Hopkinson
- | | | |
|--------------------------|--------------------------|--------------------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <i>The Three Little Pigs</i> by Paul Galdone |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>This House is Made of Mud</i> by Ken Buchanan |

- Kapla Block Building
- | | | |
|--------------------------|--------------------------|---------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 200 Kapla blocks (2 bins) |
| <input type="checkbox"/> | <input type="checkbox"/> | Kapla block pictures |

- Building a Skyscraper with Discs and Rods
- | | | |
|--------------------------|--------------------------|----------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 2-inch length pool noodles |
| <input type="checkbox"/> | <input type="checkbox"/> | 4-inch length pool noodles |
| <input type="checkbox"/> | <input type="checkbox"/> | 6-inch length pool noodles |
| <input type="checkbox"/> | <input type="checkbox"/> | Skewers of various lengths |

- Skeleton Frame Built out of Straws
- | | | |
|--------------------------|--------------------------|---------------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 2 bags of 6-inch straws |
| <input type="checkbox"/> | <input type="checkbox"/> | 2 bags of 8-inch straws |
| <input type="checkbox"/> | <input type="checkbox"/> | 2 containers of small and large paper clips |

- Cup Construction
- | | | |
|--------------------------|--------------------------|---------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 2 oz. plastic cups |
| <input type="checkbox"/> | <input type="checkbox"/> | 9 oz. plastic cups |
| <input type="checkbox"/> | <input type="checkbox"/> | 12 oz. plastic cups |

- To Be Provided by Borrowing Library*
- | | | |
|--------------------------|--------------------------|----------------------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | 2, 9, and 12 oz. plastic cups |
| <input type="checkbox"/> | <input type="checkbox"/> | Sturdy plastic straws cut to 6 in and 8 in lengths |
| <input type="checkbox"/> | <input type="checkbox"/> | Plastic coated paper clips |
| <input type="checkbox"/> | <input type="checkbox"/> | Pool noodles cut into 2 in, 4 in, and 6 in lengths |
| <input type="checkbox"/> | <input type="checkbox"/> | Skewers cut into 4 in, 6 in, and 8 in lengths |

* Some of these materials are provided in the kit but may be recommended to purchase as they will not be restocked by NMSL in the future.

Checked by _____ Date _____

Checked by _____ Date _____

Kapla Block Building

Beforehand:

Check that blocks and prompts are ready to go.

Materials

- 200 Kapla Blocks

Preparation

Spread out a bin's worth of Kapla blocks on the table. Create two or three different types of structures as models/inspiration. Set up the prompt.

Questions to Extend Discoveries

Invite participants to build using the Kapla blocks. Build alongside the participants. The following questions can be used to encourage discoveries as you build together.

“Tell me about your structure/building.”

“How tall can you build a Kapla block tower? Does it matter how you place the individual blocks?”

“Try making a structure with each level larger than the one below. What do you find out?”

“Use the blocks to build a bridge, a house, an abstract design....”

“What other types of structures can you create with the Kapla blocks?”

Cup Construction

Beforehand:

Check for any broken cups. Purchase new cups if needed.

Materials

- 2 oz plastic cups (minimum of 50)
- 9 oz plastic cups (minimum of 50)
- 12 oz plastic cups (minimum of 50)

Optional to Gather:

- Fan
- Balloons pumps

Preparation

Set cups out on the table. Construct a couple of different-looking towers to use as models and to provide ideas. Set up prompt.

Questions to Extend Discoveries

Invite participants to build structures out of the plastic cups. Build alongside participants. The following questions can be asked to encourage discoveries:

“Tell me about your structure/building/tower.”

“How tall can you build a cup tower? Does it matter how you place the individual cups?”

“Try making a structure where each level is larger than the one below. What do you find out?”

“Use the cups to build a bridge, a house, an abstract design...”

“What other types of structures can you create with the cups?”

Optional: Set up a fan or provide balloons pumps. Invite participants to build a structure that withstands the force of the wind, from a gentle breeze to a gust of wind to “hurricane” strength winds.

Skeleton Frame built out of Straws

Beforehand:

Check that straws are in good shape, not bent or cracked, and that there are enough straws. Replace if necessary. Check that plastic-coated paper clips are in good shape and there are enough. Replace if necessary.

Materials

- 6-inch length straws (minimum of 250)
- 6-inch length thick straws (minimum of 250)
- 8-inch lengths straws (minimum of 250)
- 8-inch length thick straws (minimum of 250)
- Plastic-coated Paper Clips (Minimum of 200)

Preparation

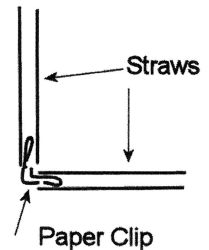
On the table, put a selection of straws of different lengths and different diameters and a container of plastic coated paper clips. Create two or three models of straw construction.

Set up prompt.

Questions to Extend Discoveries

Unfold a paperclip and use it to attach two straws together [image on right].

Invite participants to experiment with connecting straws in different ways to create two-dimensional or three-dimensional shapes that can form a tower, a bridge, or some other structure. Ask the following questions to encourage discoveries:



“Tell me about your structure/building.”

“Try building a cube out of the straws. How stable is your cube? Try blowing on it. What happens?”

“Try building a pyramid out of the straws. How stable is your pyramid? Try blowing on it. What happens?”

“How tall can you build your tower?”

“Try building a tower out of squares. What do you notice about the stability of your tower?”

“Try adding cross beams made of triangles to your tower. What happens to its stability?”

“What other types of structures can you build?”

Building a SkyScraper with Discs and Rods

Beforehand:

Check that there are enough pool noodles in good shape (replace if needed) and skewers.

Materials

- 2-inch length pool noodles (minimum of 20)
- 4-inch length pool noodles (minimum of 20)
- 6-inch length pool noodles (minimum of 15)
- 4-inch skewers (minimum of 100)
- 6-inch skewers (minimum of 100)
- 8-inch skewers (minimum of 100)

Preparation

Set out pool noodles and skewers. Connect a few pool noodle pieces with skewers as examples.

Set up prompt.

Questions to Extend Discoveries

Invite participants to use the pool noodles and skewers to create structures. Build alongside the participants, and encourage their construction and creation with the following questions:

“Tell me about your structure/building.”

“What happens if...”

“Try building a tall structure.”

“Try building a structure that does not fall over when you blow on it.”

“What other types of structures can you build?”

Adaptation: For toddlers and babies, set out pool noodles without the skewers for them to build and knock over.