



Teacher's Pre- and Post-Program Visit Guide

Program	Block by Block
Grade Level	Pre K-K
Time	30 minutes
Location	Duke Energy Children's Museum

Program Objectives

- Students will learn about basic building techniques and how to identify basic geometric shapes.
- Students will work together in small groups to co-operatively build an assigned structure.
- Students will sort and classify building blocks by color, size and shape.

Program Description

Learn to build. Build to learn! Use a variety of materials to construct, sort and classify while working cooperatively.

Major Vocabulary and concepts

sorting	graphing	cooperation
teamwork	shapes	colors
patterns	size	compare/contrast
structure		

Ideas for pre-visit activities

- Discuss basic shapes and what qualities make the shape what it is.
- Practice sorting classroom items and focus the students' attention toward the similarities and differences of an object.
- Have children draw pictures for different types of buildings and see if they can build something similar to their drawing.
- Create team-building sessions for your class. Have the children complete goals that would otherwise be impossible without teamwork and cooperation.

Ideas for post-visit activities

- Encourage students to continue to explore other building techniques in the *Kids at Work* exhibit area and at school or home.
- Place common objects and shapes into patterns and have the children work on continuing the pattern that you started.
- Make a classroom graph of pets. See how many children have cats, dogs, etc. Record results with the students.

Standards

Ohio: Physical Sciences, Scientific Inquiry, Scientific Ways of Knowing

Kentucky: Physical Sciences, Scientific Inquiry, Applications & Connections

Indiana: The Physical Setting, The Mathematical World, Scientific Thinking, Common Themes

Related Exhibits and Features

- *Kids at Work* exhibit area in the Duke Energy Children's Museum.

Resources

- www.kidspych.org (Interactive lessons and games for kids.)
- *Brown Rabbit's Shape Book* by Alan Baker
- *Circle Dogs* by Kevin Henkes
- *Red Bear's Fun with Shapes* by Bodel Rikys
- *So Many Circles, So Many Squares* by Tana Hoban
- *The Secret Birthday Message* by Eric Carle
- *When a Line Bends ... A Shape Begins* by James Kaczman