Clarendon
Early Education Services, Inc.

Special Preschool STEM Edition!

BUILDING THINGS!
Greetings! Clarendon is very pleased to present another special Preschool STEM edition of LEARN. This project is made possible through generous grant funding from the Massachusetts Department of Early Education and Care.

This month we hope that you will enjoy building things with the children in your program, and we encourage you to use both traditional materials like blocks as well as recycled, natural, and non-traditional materials. Through open and focused explorations you can help children gain experience in basic construction concepts and promote growth across developmental domains. By engaging children in these investigations, helping them to explore and encouraging them to talk about and reflect on their work, your young scientists will be learning about important physical science concepts:

- Forces: gravity, tension, compression
- Planning: design, balance, supports, stability
- Materials: shape, size, weight, texture, strength, natural or man-made

Most importantly, please remember these words written by Rachel Carson in 1965...

If a child is to keep alive his inborn sense of wonder, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, the excitement, and the mystery of the world.

PLANNING PROJECTS WITH CHILDREN

Involving children in planning projects is a wonderful way to engage or expand on their interests and deepen their understanding of the world around them. This process usually begins with a discussion about what children already know, their own experiences and what they want to learn about a topic. You might ask children to draw pictures, tell a story or you might read a related book to spark discussion or gather information. Plan on spending a at least a few days on this process.

- Document children’s thoughts and questions on chart paper, making a web if you like.
- Take photos or collect drawings to add to your plans.
- Help children develop questions and write them down. What do you wonder about that building? Why does that bridge stay up? Ask them to predict the answers to their questions.
- Tell parents about what you’re doing and ask them to talk about the topic at home. See if they have any experience with the topic.
- Ask the children how you might find answers to their questions. Where could you go? Could someone come to visit the program?

Please see Resources for great information about The Project Approach and tips for planning with young children. Have fun and enjoy the surprises that children bring to your work!
OUR PHILOSOPHY

Children learn through positive interactions with caring adults who understand how children develop and provide opportunities for meaningful hands-on learning experiences. They learn best through engaging their senses and need individual support as they explore and discover themselves, others and the world around them in the context of their families and cultures.

LEARNING EXPERIENCES AND INVESTIGATIONS

ART

Recycled Buildings
Materials: Cereal and other clean boxes, paper towel rolls, plastic bottles, bottle caps, straws, scissors, tape, hole punch, paint and brushes, markers, collage materials
Procedure: Provide a variety of materials and talk with the children about what they would like to build. Use vocabulary like tower and bridge, etc. Ask questions to help them plan. Allow children to build whatever they like, from an abstract sculpture to a castle or doll house. Support their ideas by adding materials or helping if they want to cut plastic bottles (cover sharp edges with tape) or need ideas for connecting items or making them stand up.
Adaptations: Help younger children to stack boxes and paper towel rolls. Take photos of their creations.
Goals: Encourage problem solving and exploration of construction techniques and art materials.

Objectives for Development and Learning:
7. Demonstrates fine-motor strength and coordination
21. Explores and describes spatial relationships and shapes.
Aligns with:
Visual Arts 20-Explore and experiment with wet and dry media in a variety of colors including black and white.
Cognitive Development 66-The younger toddler explores with sensory art materials and uses them to create visual effects.
Physical Health and Well-Being 10– The older infant demonstrates strength and coordination of small motor muscles.

BLOCKS

Building Inspiration
Materials: Blocks, Legos or other building materials, accessories (people, animals, vehicles), photos and books about structures
Procedure: Provide photos and books with pictures of structures like tunnels, bridges, skyscrapers, houses around the world, etc. Be sure to include buildings that will be interesting to girls. Talk with the children about how they think the structures were built and what materials were used. What shapes/patterns do you see in that building? Encourage the children to select materials and build their own versions of the structures. How did you make that tunnel? Why did you choose those blocks? Photograph their constructions for a display to share with families.
Adaptations: Help infants and young toddlers to stack soft or foam blocks and knock them down!
Goals: Provide an opportunity to explore a variety of structures, homes from other cultures, building materials and concepts of balance and stability.

Objectives for Development and Learning:
21. Explores and describes spatial relationships and shapes.
26. Demonstrates knowledge of the physical properties of objects and materials.
Aligns with: Mathematics 9-Recognize, describe, reproduce, extend, create and compare repeating patterns of concrete materials. 11-Explore and identify space, direction, movement, relative position and size using body movement and concrete objects. Physical Health and Well-Being 22-The older infant develops eye-hand coordination and more intentional hand control.
LEARNING EXPERIENCES AND INVESTIGATIONS

TOYS AND GAMES

Natural or Man-Made?
Materials: Samples of wood, stone, metal, sticks, wallboard, Styrofoam, Plexiglass, PVC, tile, rubber, etc. (or photos, but real items are better!)
Procedure: Ask the children to examine and describe the building material samples. Which one do you think is strongest? What would be the best thing for a roof? Encourage the children to sort natural materials from materials made by people. Where do you think it comes from? Help them to use books or the Internet for research if they need more information.
Adaptations: Encourage younger children to explore textures.
Goals: Provide opportunities for exploring building materials and comparing natural and man-made items.

Objectives for Development and Learning:
13. Uses classification skills.
26. Demonstrates knowledge of the physical properties of objects and materials.
Aligns with:
23. Explore and describe a wide variety of natural and man-made materials through sensory experiences.

MUSIC

Rhythms with Tools and Wood
Materials: Wood scraps, blocks, hammers
Procedure: Encourage children to create and follow simple rhythmic patterns by hitting two wood scraps or blocks together, or by banging wood with a hammer! Add music for inspiration.
Adaptations: Help infants to bang blocks on the floor or other surface.
Goals: Promote creative physical activity and awareness of rhythmic patterns.

Objectives for Development and Learning:
23. Demonstrates knowledge of patterns.
34. Explores musical concepts and expression.
Aligns with:
The Arts 13-Listen to, imitate and improvise sounds, patterns or songs.

STORIES AND BOOKS

Changes, Changes
Materials: Changes, Changes by Pat Hutchins, blocks, block play people
Procedure: Ask children to tell the story in this wordless book. Encourage questions and comments. Talk about shape, size and balance. Provide blocks and people and ask the children to recreate the story. Take photos or videos of the process to create a class book.
Adaptations: Help younger children to create one or two of the structures in the book. Encourage older children to create their own stories with blocks.
Goals: Relate children’s building experiences to a book while encouraging understanding of math and science concepts during dramatic play.

Suggested books:
Arches to Zigzags—Michael Crosbie-T/PS/SA
How a House is Built—Gail Gibbons-T/PS/SA
The Three Little Pigs—James Marshall-T/A
When I Build with Blocks—Niki Alling-I/PS/SA
Goodnight, Goodnight Construction Site—Sherri Rinker-I/PS/SA
Building a House—Byron Barton-PS/SA
Wonderful Houses Around the World—Akira Nishiyama-PS/SA
A Year at a Construction Site—Franklyn Branly-PS/SA
This House is Made of Mud—Ken Buchanan-PS/SA
Three Little Javelinas—Susan Lowell-T/PS/SA
Dreaming Up—Christy Hale-T/PS/SA
Iggy Peck, Architect—Patricia Beaty-PS/SA
Rosie Revere, Engineer—Patricia Beaty-PS/SA
FOCUS ON SCIENCE: Exploring Building

Materials: Variety of natural and man-made materials, including different kinds of blocks, wood scraps, boxes, paper towel or gift wrap rolls, plastic cups, plastic bottles, sticks, clay, rocks, straws, string, newspaper, magazines, tape, wire. Please ask the children for ideas and add things! *Use goggles as needed.*

Procedure: Consider using the KWL model while exploring building (what the children *Know*, what they *Want* to know and what they *Learned*). In other words, help them to plan, do and reflect on what they discover. Over time, provide a variety of building materials and help them to plan their constructions. Write their ideas and questions on a large sheet of paper to revisit and discuss later. Encourage children to think about strength of materials, combining and connecting things, stability of structures and which materials work best for which purposes. Encourage discussion and sharing of ideas through conversation and asking questions. *Tell me about your building. What did you try to make it balance? Why do you think it fell down? What else could you try? Can you think of another way to make the pieces stay together?* Be sure to engage girls by providing materials that interest them (see *Resources*). Encourage creativity and help the children to document their work. Allow time for them to reflect on what they have discovered.

Adaptations: Help non-mobile children to build with smaller or softer items and explore texture.

Goals: Encourage science inquiry skills, investigation of materials, cooperation and sharing of ideas, exploration of basic science and engineering concepts including balance and forces, interest in math concepts like shape, pattern and measurement and curiosity about construction techniques, structures and homes around the world.

**Aligns with PreK STE Standards:**
- PreK-PS1-2. Investigate natural and human-made objects, describe, compare, sort and classify objects based on observable physical characteristics, uses, and whether something is manufactured or occurs in nature.
- PreK-PS2-2. Through experience, develop awareness of factors that influence whether things stand or fall.
LEARNING EXPERIENCES AND INVESTIGATIONS

FOCUS ON TECHNOLOGY:
Building Bridges
Materials: Boxes or blocks, paper, cardboard, pennies or pebbles, tape, paper tubes, small plastic animals
Procedure: Show children photos of bridges (or take a walk to see bridges) and talk about how they are built, including materials and tools. Space two boxes or large blocks about 6” apart and ask the children to make a bridge using paper. Experiment to see how many pennies or pebbles can be added before it falls. How could you make the bridge stronger? I wonder if folding the paper would help. What could you use to make a longer bridge? Encourage children to try using paper tubes for support. What could we try to make a bridge for the animals?
Adaptations: Encourage younger children to make bridges with blocks.
Goals: Provide an opportunity to explore the strength of materials and test ideas while building something to meet a need.

Construction in Progress
Materials: Computer with Internet access
Procedure: Watch this video of a house being built: http://www.youtube.com/watch?v=yERpT-4o9wY.
Call attention to the tools used and materials used. Introduce new vocabulary and discuss how tools and machines make work easier for people. Talk about how the builders make the house stand up, and encourage the children to build their own houses. How did you make the walls? What would be a good thing to use for the roof? If you were building a real house, what tools would you need?
Adaptations: Watch the video of Goodnight, Goodnight Construction Site (see Resources) and provide play construction machines to use with blocks.
Goals: Develop awareness of the purposes of tools and machines as well as construction techniques.

Aligns with PreK STE Standards:
PreK-PS1-4. Recognize through investigation that physical objects and materials can change under different circumstances.
PreK-PS2-2. Through experience, develop awareness of factors that influence whether things stand or fall.

Aligns with MA Preschool Guidelines:
Inquiry Skills 1-Ask and seek out answers to questions about objects and events with the assistance of interested adults. 2-Make predictions about changes in materials or objects based on past experience.
Technology and Engineering 23-Explore and describe a wide variety of natural and man-made materials through sensory experiences.
24-Demonstrate and explain the proper use of tools and materials.
LEARNING EXPERIENCES AND INVESTIGATIONS

FOCUS ON ENGINEERING

Floor Plans for Block Buildings
Materials: Blocks, pencils, paper, blue crayons or markers, large sheets of paper
Procedure: Talk with the children about people who create buildings (carpenters, electricians, etc.) Discuss what architects do and show them a picture of a floor plan, blueprint, or building model. Ask them to think about something they would like to build. Encourage the children to trace on paper around the blocks they use for the base of the building. What shapes do you see? Do you see any patterns on your plan? Allow children to complete their constructions and ask them to draw it from the side and the top. Talk about how architects use drawings and models to plan buildings.
Adaptations: Trace blocks with different shapes and encourage younger children to match the blocks with the shapes.
Goals: Provide an opportunity to engage in design and construction, investigating math and science concepts, and learn about jobs people do.

Aligns with PreK STE Standards:

PreK-PS2-2. Through experience, develop awareness of factors that influence whether things stand or fall.
PreK-PS1-1. Investigate the natural and human-made objects, describe, compare, sort and classify objects based on observable physical characteristics, uses, and whether something is manufactured or occurs in nature.

Aligns with MA Preschool Guidelines:

Technology and Engineering 23-Explore and describe a wide variety of natural and man-made materials through sensory experiences.
Mathematics 9-Recognize, describe, reproduce, extend, create and compare repeating patterns of concrete materials. 10-Investigate and identify materials of various shapes, using appropriate language.
History and Social Science 10-Observe and discuss the various kinds of work people do outside and inside their homes.

Aligns with PreK STE Standards:

PreK-PS1-4. Recognize through investigation that physical objects and materials can change under different circumstances.
PreK-PS2-2. Through experience, develop awareness of factors that influence whether things stand or fall.

When the Wind Blows
Materials: Paper or plastic cups, cardboard
Procedure: Provide different kinds of cups and pieces of cardboard. Ask the children to build the tallest structure they can. What is the best way to stack the cups? Why did your building fall down? Which cups work best? I wonder if you could use the cardboard to make it stronger. When the children are done, talk about what would happen to their building if the wind blew. Ask them to create wind by waving a book or piece of cardboard. What could you try to keep the wind from blowing your building down? Which buildings were the strongest? Why do you think that one stood up?
Adaptations: Help younger children with stacking cups or soft blocks, and creating wind to knock them down.
Goals: Encourage the use of simple materials to explore balance, strength and stability. Help children learn to reflect on their investigations and draw conclusions.

Aligns with MA Preschool Guidelines:

Inquiry Skills 1-Ask and seek out answers to questions about objects and events with the assistance of interested adults.
2-Make predictions about changes in materials or objects based on past experience.
Physical Sciences 22-Experiment with a variety of objects to determine when the objects can stand and ways that objects can be balanced.
Technology and Engineering 24-Demonstrate and explain the safe and proper use of tools and materials.
FOCUS ON MATHEMATICS: Building Towers

Materials: Blocks or other building materials, paper and markers, camera, string

Procedure: Talk with children about their experiences building towers. What did you use? Show pictures of tall buildings and encourage the children to build the tallest tower they can. Teach them to put on a hard hat if the tower is above their head to protect from falling blocks. Ask questions about balance and stability and use comparative words. How did you get that to balance? What could you try to make your tower less wobbly? Take photos and talk about how they built their towers. How many blocks did you use? Is there a pattern in your tower? Help them to measure their towers with string and graph results.

Adaptations: Provide stacking cups or blocks for younger children.

Goals: Provide an opportunity to explore building materials and concepts of balance and stability. Encourage understanding of shapes, patterns, counting and measuring with hands-on experiences.

Aligns with MA Preschool Guidelines:
Mathematics 3-Use positional language and ordinal numbers in everyday activities.
9-Recognize, describe, reproduce, extend, create and compare repeating patterns of concrete materials.
11-Explore and identify space, direction, movement, relative position and size using body movement and concrete objects.
15-Organize and draw conclusions from facts they have collected.

Patterns in Building

Materials: Paper, pencils, blocks or other building materials, books about buildings or photos

Procedure: Ask children to look for patterns in buildings indoors and/or outdoors (windows, floors, structures, columns, etc.) and draw what they see. Tell me about the pattern you found in the floor. Do you see a pattern in the shapes or the colors? How is that different from the pattern we saw on the roof? Provide a variety of building materials and encourage the children to reproduce the patterns they observed in their own constructions and compare with their drawings. Use words like short, wide, thick, heavy, flat, etc. to describe properties of the objects they use.

Adaptations: Try using cut paper to reproduce patterns, encouraging the children to extend the patterns.

Goals: Promote careful observation, awareness of characteristics of materials and recognition of patterns, encouraging comparison of concrete materials and reflection.

Aligns with MA Preschool Guidelines:
Mathematics 7-Explore and describe a wide variety of concrete objects by their attributes.
9-Recognize, describe, reproduce, extend, create and compare repeating patterns of concrete materials.
10-Investigate and identify materials of various shapes, using appropriate language.
12-Listen to and use comparative words to describe the relationships of objects to one another.
LEARNING EXPERIENCES AND INVESTIGATIONS

DRAMATIC PLAY
Architects and Builders
Materials: Large paper bags, real or play tools, scissors, markers, collage items, paper, pencils, rulers, toy construction vehicles, hard hats (optional)
Procedure: Read a story or talk about architects and builders and how they work together to make buildings. Help children to make dress-ups using paper bags and to work as teams to design and build! Remember to plan and document.
Adaptations: Offer design challenges like building a house for an elephant or a dinosaur!
Goals: Engage children in creative dramatic play and enhance understanding of jobs people do and building techniques and tools.

OUTDOOR PLAY
Fairy Houses!
Materials: Sticks, leaves, bark, rocks, moss, etc.
Procedure: Read a story about fairies and/or talk about where the children think fairies might live. Photos can be found online if they need ideas. Take a walk to a place where you can find the natural materials listed above. Encourage the children to gather materials, talk about where the items come from and plan what they want to build. What could you use to keep the rain out? Do you think fairies need stairs? Where will the fairies sleep?
Adaptations: Provide containers for younger children to fill and dump materials while talking about texture. Build indoors using natural materials.
Goals: Encourage exploration of natural materials and imaginative play.

SENSORY
Building with Sand and Water
Materials: Sand, water, plastic containers, sand shovels, sticks, toy vehicles, straw if available
Procedure: Read This House Is Made of Mud. Allow children to mix sand and water and experiment with the best mixes for building.
Adaptations: Try building with play dough!
Goals: Use sensory materials to encourage creativity and awareness of the properties of materials.

Objectives for Development and Learning:
36. Explores drama through actions and knowledge.
Aligns with:
Theatre Arts 17-Create scenarios, props and settings for dramatizations and dramatic play.
Cognitive Development 70– The older toddler expands on pretend play and recreates familiar settings through the imaginative use of props and clothing.

This House Is Made of Mud

Objectives for Development and Learning:
14b. Engages in sociodramatic play.
26. Demonstrates knowledge of the physical properties of objects and materials.
Aligns with:
Technology and Engineering 23-Explore and describe a wide variety of natural and man-made materials through sensory experiences.
Approaches to Learning 2-The older infant shows curiosity by exploring with the senses.

Objectives for Development and Learning:
11e. Shows flexibility and inventiveness in thinking.
26. Demonstrates knowledge of the physical properties of objects and materials.
Aligns with: Earth and Space Sciences 5-Compare and contrast natural materials such as water, rocks, soil and living organisms using descriptive language.
Building with Fruit!

Suggested ingredients:
Toothpicks or straws
Melon
Pineapple
Strawberries
Blueberries
Kiwi
Bananas

Provide each child with a paper plate, plastic knife and variety of cut up fruit. Encourage them to build with the fruit, using the toothpicks as connectors. Try using straws cut into thirds for younger children. Tell me about your building. What did you do first? What kind of fruit did you use the most? Why?

Encourage children to share their ideas and talk about the different colors, textures and shapes of the fruit, as well as how and where the fruit is grown. What do you think those black spots in the kiwi are?

Try making a graph of children’s likes and dislikes of different kinds of fruits, or a graph of how many of each kind they used in their tasty creations!

Math in the Kitchen

The kitchen gives us many opportunities to expose children to different math concepts, including numbers, quantity, order, size, shape, comparison, classification, estimation, measurement, and data collection. Children love cooking and math in the kitchen is fun!

- Write a simple recipe on chart paper and show children each step as you go. What should we do first? Second? How many teaspoons do we need next?
- Allow children to help you measure. Talk about half and whole. Can you add a half a cup of milk?
- Encourage comparison. Do we need more milk or more flour? Which cup holds the most? What feels heavier? Compare wet and dry ingredients.
- Ask children to count as they add teaspoons of ingredients.
- Talk about the shapes of pans, containers and food items. Encourage children to cut foods into different shapes.
- Engage children in estimating. How many muffin tins can we fill with this batter? How many berries do you think are in this cup?
- Help children to create surveys about food preferences and put marks on a chart to record results and discuss.

Beware of choking hazards and food allergies when planning any cooking project!
Field Trip Ideas

- The Discovery Museums, Boston Children’s Museum, and the Springfield Museums have exhibits and programs about building.
- Take a neighborhood walk to look at different kinds of structures (bridges, towers, etc.), building materials and building components.
- Visit a construction site. Stay safe!
- Take an elevator ride in a tall building!
- Go to a hardware store. Look at different tools and materials. Help the children to prepare questions in advance.

RESOURCES

http://www.youtube.com/watch?v=yERpT-4o9wY-This is a time-lapse video of a house being built.
http://archkidecture.org/-This site is more appropriate for older children but has some great ideas for projects!
https://www.naeyc.org/files/tyc/file/TYC_V3N3_StrasserandKoeppel.pdf-This article from TYC describes strategies for engaging girls in block play.
http://www.bostonchildrensmuseum.org/sites/default/files/pdfs/STEMGuide.pdf-This guide includes great information about building with young children.
http://www.resourcesforearlylearning.org/educators/-Click on Building Structures for a comprehensive curriculum about construction for preschoolers.
http://www.pbs.org/wgbh/buildingbig/-This PBS website includes challenges for school age children and a databank of wonderful buildings around the world.
http://www.youtube.com/watch?v=OoBLhG1erjI-Watch a video of Goodnight, Goodnight Construction Site.
http://www.youtube.com/watch?v=CDqhttp://mSBKTX5o-Here is a video of the Three Little Javelinas.
fairydustteaching.com/2011/03/developmental-stages-of-block-play/-This article describes the developmental stages of block play.
http://illinoisearlylearning.org/tipsheets/blocks.htm-This tip sheet has ideas for block play.
http://illinoisearlylearning.org/tipsheets/projects-questions.htm-Here is information about helping children develop questions.
http://constructingmodernknowledge.com/cmk08/?p=1557-Many excellent handouts describing components of Lillian Katz’ work on The Project Approach can be found on this site.
http://www.youtube.com/watch?v=SwhO_gnJlhE-This is a video of This House Is Made of Mud read in Spanish.

Building Structures with Young Children, Ingrid Chalufour and Karen Worth, EDC, 2004
Hello! Young children love building things and this month Clarendon educators are helping your child to learn while having fun building. We are using all kinds of things for building, including blocks, boxes, sticks and cups. We will also be looking at a variety of buildings and talking about parts of buildings and materials. Here are some examples of the learning opportunities your child experiences when building things!

- Children are exploring math concepts like size, weight, pattern, position and number as they build and look at other constructions.
- Building allows children to develop awareness of science concepts like balance and force while encouraging comparison of different materials. These experiences allow them to investigate the uses of simple tools and compare to determine which works best.
- Children of all ages are practicing and refining physical skills as they build with large and small items.
- Through related books and stories, writing and dictation, children are strengthening literacy skills.
- Clarendon educators always support the development of self-esteem, social skills and creativity, and building things provides many unique opportunities for children to be successful, work with others and unleash their inner creative spirit!

**Ask me about:**

- The things I like to use for building.
- How I built a bridge.
- What I built with blocks.
- How I made music with blocks!
- A story I liked about building.
- How tall a tower I can build.
- Different kinds of tools I tried.
- How I made a fairy house!
- Different types of buildings I saw.

**INTERNET RESOURCES**

- [http://www.youtube.com/watch?v=OoBLhG1erjg](http://www.youtube.com/watch?v=OoBLhG1erjg)-Watch a video of Goodnight, Goodnight Construction Site.
- [http://www.pbs.org/wgbh/buildingbig/](http://www.pbs.org/wgbh/buildingbig/-This PBS website includes challenges for school age children and a databank of wonderful buildings around the world.
- [http://illinoisearlylearning.org/tipheets/blocks.htm](http://illinoisearlylearning.org/tipheets/blocks.htm)-This tip sheet has great ideas for block play.
- [http://www.youtube.com/watch?v=yERpT-4o9wY](http://www.youtube.com/watch?v=yERpT-4o9wY)-This is a time-lapse video of a house being built.
- [http://brainbuildinginprogress.org/](http://brainbuildinginprogress.org/-The Brain Building in Progress website has wonderful ideas to try with your child.
BUILDING THINGS

SOCIAL-EMOTIONAL
Provide a space for children to display their constructions. Photograph children's projects to create a display or photo album. Talk with children about the kinds of buildings they live in. Encourage children to compare their own size with other structures. Make a cozy spot with couch cushions.

LANGUAGE
Have examples of tools used for building for children to explore and discuss their names and uses. Use photos to introduce the names of different structures like bridges, tunnels, stairs, arches, etc. Reinforce simple shape names as children are building. Show the book "Cone, Cubes, Cylinders and Spheres" and introduce the names of the forms as children are ready. Encourage children to name and label their constructions. Provide examples of building materials and label them.

COGNITIVE
Provide a variety of blocks for children to sort and categorize by shape, color, material, or size. Include books about blocks or legos in your building area for children to reproduce what they see. Make a lotto or memory game with pictures of tools or different kinds of structures like tunnels, towers, bridges, etc. Challenge children to make a bridge for a dinosaur or stuffed animal. Sort natural and man-made building materials.

ENGLISH LANGUAGE ARTS/LANGUAGE & COMMUNICATION
Take photos of children building with blocks. Ask them to dictate their stories and create a display. Encourage children to construct a puppet with materials of their choice to make a robot, person or animal. Read a book about building a house. Encourage the children to build their own houses and write a book about the process. Demonstrate and discuss the concept of balance. Ask children about how they might build a house for an elephant and write a group story.

THE ARTS
Provide newspaper and tape for children to create sculpture. Gather a variety of recycled materials (paper tubes, cardboard, plastic bottles, wood scraps, etc.) and provide tape, glue, paper clips and string for connectors. Allow children to build and decorate as desired. Use shoeboxes to build dollhouses or apartment buildings and provide accessories and art materials. Create rhythms using blocks or sticks. Move like different construction vehicles. Build with natural materials like sticks and rocks. Make a fairy house or dinosaur cave.

SCIENCE AND TECHNOLOGY/ENGINEERING
Encourage children to create structures with rolled newspaper. Challenge children to create towers with straws and tape, and to blow on them to see which are strongest. Talk about why. Use many kinds of blocks, boxes, Styrofoam, sticks, tubes, etc. for construction and encourage children to experiment with strength and balance. Trace blocks or use masking tape to make building plans for buildings. Help children construct with toothpicks and Styrofoam packing peanuts. Help children identify building materials like wood, stone, and brick.

HISTORY AND SOCIAL SCIENCE
Take a walk to look for different kinds of buildings and structures. Provide children with paper and pencils to draw what they see. Discuss different building materials and where they come from. Encourage children to create endorseriies for animals with blocks or boxes. Read a book about building and discuss the names of trades people. Introduce what architects do and talk about planning constructions. Invite a visitor. Visit a construction site and encourage children to draw what they observe.

MATHEMATICS
Encourage children to build two towers the same height and count how many blocks or items they used. Trace blocks on large paper and encourage children to match the patterns. Encourage children to compare blocks by weight. Use Styrofoam and craft sticks and encourage children to order the sticks by height. Make shapes with string and straws. Compare the sizes of structures in your neighborhood.

FAMILY ENGAGEMENT
Ask families to contribute recycled materials. Invite family members to build with the children. Find out if any family members work in the construction industry and invite them to visit. Send information home about what children build and what they are learning. Text photos of children's work.
This month in our program...

OUR FAVORITE ACTIVITIES...

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CHANGES TO THE ENVIRONMENT...

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SPECIAL EVENTS...

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CHILDREN’S INTERESTS TO FOLLOW UP...

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Name:_____________________________________________________________________________
Weekly curriculum planning time: _____________________________________________________
Weekly meeting with assistant (if applicable): ___________________________________________