

Recommended Age: 53-60 Months

STEM concepts: Science (physical science), Technology (simple tools), Engineering (Engineering), Math (pattern Identification, shapes and spatial identification)

Materials: playdough, (model magic and slime can make for trouble shooting conversations but is not necessary), a set of magnetic alphabet, straws(non-plastic prefered), uncooked spaghetti, unsharpened pencils, small pieces of cardboard. The expansion of this activity requires the book - *Chicka Chicka Boom Boom* by Bill Martin

What to do: The object of this activity is to get your child to think about the different properties of the materials they are given. Encourage them to use the clay or playdough to hold the straws, spaghetti and cardboard together. Place the letters on or hang them from the tree. Remember it is the process of doing this that matters not the product. This means encourage them and guide them to be successful but let them discover failures also. If their tree falls down, encourage them to try again and try to help them discover what went wrong. This is a great problem solving activity while they're learning their letters and engineering a tree.

Language and Communication: Discuss the building process. What do the different materials feel like. Use comparison words like soft, hard, big and litte. Encourage them to feel how heavy the letters are by giving them to your child in a bag. Remind them that the tree has to hold them. Give them a piece of material and see if they can balance letters on one piece of material. Try another. While doing this talk about why it could or couldn't hold the letter. During this exploration encourage your child to identify the letter. Add the letter's sound in your conversation. This is great literacy development.

Expand the Activity: Add literacy and meaning to this activity by reading *Chicka Chicka Boom Boom* by Bill Martin with your child! This activity was inspired by this book. If you choose to read the book first it will provide a challenge for your child. Can they build a tree to hold the whole alphabet? Make the tree to hold only the letters they know. Everytime they add a letter will it hold?