

45 Recycled Materials and Three-Dimensional Constructions

Children use scrap and recycled materials to create multidimensional structures.

Time of day: Small-Group Time

Content Area: Creative Arts: Art

Materials

Materials for each child and teacher:

- Variety of scrap and recycled materials (e.g., plastic containers, foam shapes, Styrofoam packing materials, Popsicle sticks, cardboard tubes)
- Cardboard boxes
- Masking tape and scissors

Shared materials:

- None

Backup materials:

- Yarn, pipe cleaners
- Materials for decorating boxes and constructions (e.g., markers, crayons, stickers)

mounting, constructing, two- and three-dimensional). Use words related to size, shape, and spatial relationships (e.g., *next to, on top of/above, below/underneath, side by side, raised/flat, higher/lower*).

- Use the materials in the same way the children do; ask for their assistance (e.g., suggest they demonstrate for you how to do what they are doing, or ask for verbal instructions).
- Refer children to one another for collaboration and problem-solving (e.g., suggest that one holds while another tapes).
- Introduce backup materials if children want to incorporate these into their structures or use them for decoration.

Beginning

- Give each child a set of materials and say something like *Some of you have been building things in the block area and woodworking area. Here are lots of materials you can use to build and construct things. I wonder what kind of things you can build with them.*

Middle

- Describe and encourage children to describe the materials they are using and what they are doing with them. Repeat their words and introduce new vocabulary words (e.g., *stacking,*

End

- Ask children where and how to display their structures (e.g., on a shelf, on carton “pedestals”). Encourage them to share their structures with parents at drop-off and pickup times. Some children may choose to take their projects home.
- Remind children where materials will be stored so that if they choose, they can continue building with them at work/choice time.
- Ask children to roll “like a roll of tape” to the next activity (or) to pretend they have sticky tape on the bottoms of their shoes!

Developmental range: Supporting children at different levels

Earlier

Children may

- Play with the construction materials, boxes, or tape (e.g., peel tape off the roll or roll it into little balls).
- Use the scissors to cut materials but not assemble them.
- Tape two materials together.
- Make a construction and then notice it looks like something familiar (e.g., *This is my apartment. I live in the middle with my mom and grandma*).

Adults can

- Use materials in the same way the child does (e.g., sort or line up materials).
- Refer the child to another child who has mastered how to use the tape (e.g., *I see that Ming is using the tape. Ask her how she got it off the roll*).
- Notice similarities between materials and familiar objects (e.g., *This tube reminds me of our tunnel slide on the playground*).
- Describe and encourage children to describe the materials and shapes they are cutting.
- Acknowledge when/how children combine materials (e.g., *You taped together the cardboard tube and the stick*).

Middle

Children may

- Wrap or decorate a container with the tape.
- Make a simple construction with one or two details (e.g., tape two sticks in a cross and stick one end in a paper towel tube).
- Label their construction (e.g., *This is my spy tube*).
- Say they are going to make something and explain how (e.g., *I'm going to build a snow fort with this box and cotton balls*), then proceed to construct it.

Adults can

- Comment on how children have wrapped or decorated their box (e.g., *Here's a pattern with red and blue dots*).
- Comment on the nature or number of materials children use (e.g., *You used one... two... three... four boxes in your tower!*).
- Ask children to describe the parts of what they created (e.g., *Tell me about this tall piece that sticks up in the air*).
- Ask children if their construction is similar to other items in the room. Look around the room with the child and talk about similarities and differences (e.g., in size, shape, texture).

Later

Children may

- Make a complex construction with three or more details (e.g., tape Popsicle sticks around the top of a carton, fill it with Styrofoam and upright tubes, and put a pipe cleaner in each tube).
- Name or describe something they have created (e.g., *This is my robot — his feet, arms, hands, and here's where the battery goes*).
- Problem-solve with the materials (e.g., try unsuccessfully to attach something with one piece of tape, then reposition it and use several pieces of crossed tape so it will hold).
- Use the backup materials to add details.

Adults can

- Ask children how they made their structures (e.g., which materials they used, how they got materials to balance or stick together).
- Acknowledge the sequence of steps children used to problem-solve (e.g., *First you tried taping the small box to the side, then balancing it, and then you put another box under it to hold it in place*).
- Encourage children to collaborate to solve a problem (e.g., *I wonder if it would work if two of you did that together*).

Ideas for follow-up

- At outside time, take children for a walk to look at the different structures and buildings in the neighborhood.
- Bring in books, architecture magazines, and other printed materials with pictures of different kinds of buildings. Bring in art books and reproductions of sculptures made of recycled materials.

Adaptations for children with special needs

- Prepare precut strips of tape for children who have trouble with fine motor coordination.
- Encourage children with visual limitations to touch and feel the construction materials; focus on size, shape, and texture.