

Big Action Construction

Publisher
Learning Company

System Requirements

Macintosh

Power Macintosh
System 7.5.1
16 MB RAM
10 MB available hard disk space
256 color monitor

4x or higher CD-ROM drive

Other PC

IBM PC or compatible
486/66 MHz or faster
16 MB RAM
10 MB available hard disk space
256 color monitor

4x or higher CD-ROM drive

Optional Computer Equipment

- Printer
- External speaker

Software Description

Children are invited to join a construction crew in *Big Action Construction*, a software program published by the Learning Company. Foreman Frank introduces safety as he invites children to print a hard hat, add string, and put it on as they join the construction crew. The program contains six activities, with certificates that can be printed at the end of each activity. A main menu offers the following choices: “Boulder Blast,” “Building Site,” “Wrecking Ball,” “Lunch Break,” “The Crane,” and the “Dump Truck.” With the different activities, children can blast rocks with dynamite to find objects, build a site from the ground up with tools, tear down buildings with the wrecking balls, clear building sites with the crane, or fill up the dump truck with gas. When children need a break, they may take a “lunch break” to make a sandwich and join their buddies as they listen to video songs found in the program. Each activity offers different guides, from Smitty, the dump truck driver, to Jane, the crane operator.

Big Action Construction

Introduction

Big Action Construction offers children an opportunity to think about tools and simulate the use of the large construction tools that they find so fascinating. Often, construction may be taking place right down the street, but adults do not take the time to show children how the tools work or to observe and document the changes that take place as a result of the construction. Taking time to examine construction and tools provides opportunities for children to learn about seven simple tools and the many ways tools affect people’s lives.

Materials

- Computer
- *Big Action Construction*
- Tools and a tray for displaying the tools

Introductory Activity

Begin several circle times by identifying different categories of tools (e.g., household, outside, and workbench). Introduce each category of tools by providing a tray full of tools. Include household tools like scissors, eggbeater, can opener, rolling pin, wisk, and broom. Hold up each tool. If a child knows the name of the tool, ask the child to pretend to use it. Outside tools include a hoe, shovel, pail, wheelbarrow, weed eater, clippers, and lawn seeder. Workbench tools include a hammer, drill, screwdriver, wrench, pliers, and vise.

Computer Activity

Encourage individual exploration during center time. Post questions above the computer related to each activity. Some examples include, “What type of machine do you use to . . .?,” “How do you choose the pieces to build the house?,” and “What happens when the wrecking ball misses the building?”

Extended Activity

Share the song, “Johnny’s Hammer,” with the children:

*Johnny works with one hammer, one hammer, one hammer.
Johnny works with one hammer, then he works with two.*

Say the same words, adding one hammer each time. Children can pretend to hammer using various body parts. For Verse 2, use two hands hitting legs. For Verse 3, use motions for Verses 1 and 2, plus tap one foot. For Verse 4, use motions for Verses 1, 2, and 3, plus tap the other foot. For Verse 5, use the motions for Verses 1 to 4, plus nod the head. At the end of Verse 5 say, “Then he goes to sleep,” and the children can place both hands by the side of their heads.

Summary

Most children find watching construction and learning about tools interesting. Teachers can capitalize on that interest by using *Big Action Construction* to help them learn about the many kinds of tools people use everyday and the importance of those tools in people’s lives. From spoons for eating cereal to crayons for drawing pictures to pry bars for removing nails to back hoes for digging holes, tools help us accomplish tasks large and small.

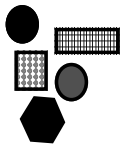
BIG ACTION CONSTRUCTION – CURRICULUM INTEGRATION IDEAS

Art



- Use recycled boxes to create big vehicles.
- Roller paint with vehicles.
- Provide children with paper and miniature tools such as wrenches and screwdrivers. Place a small amount of thick tempera paint in a flat pan. Children can put the tools in the pan, then remove them and use them to make designs on the paper.
- Provide children with carbon paper; construction paper; and tools such as racing wheels, pizza cutters, and pastry wheels. They can place the carbon paper over the construction paper and use the wheels to make a design on the construction paper.

Blocks/Manipulatives



- Build with big wooden blocks.
- Use big dump trucks, diggers, and tractors.
- Put vehicle puzzles in the puzzle center.
- Use magnet shapes to create vehicles.



Construction

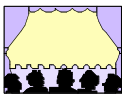
- Cut shapes from paper in a variety of sizes and textures and use them to create and design big vehicles.
- Cut big vehicle pictures out of farm magazines.
- Make road signs for “Tiny Town.” Include signs that say “Stop,” “Slow,” and “Speed Limit.”



Cooking/Snacks

- Make circle-size snacks, including pizza rounds, wheel macaroni and cheese, and biscuits.
- Create an iced graham cracker truck, and use mini-Ritz crackers as wheels.

Dramatic Play



- Provide a “Machine Repair Shop” center. Include gas pump, signs, and the tools children can use to repair vehicles.
- Set out hard hats and work belts so children can dress as construction workers.

Group/Individual Story Experiences



- Write a class story at circle time about going on a ride in a big truck.
- Make a class book after going on one of the field trips (see “Extensions Beyond the Classroom”). Use photos taken during the trip, children’s drawings of things they saw, and stories about the

trip that children wrote or dictated.

Music and Movement



- Sing any of the following songs: “Wheels on the Bus,” “Wheels on the Truck,” “I’m A Windshield Wiper,” “Safety Belts,” “Down by the Station,” and “Bumpin Up and Down in My Little Red Wagon.”
- Lead children in singing “This is the Way We Brush Our Teeth” to the Mulberry Bush tune as they search for brushes (see “Outdoor Play/Motor”). Variations include brush our hair, polish our nails, and paint our house.

Outdoor Play/Motor



- Play outside or in the gym with big trucks and riding toys.
- Draw roads on the sidewalk and blacktop for riding toys. Add stop signs and a gas pump.
- Play follow the leader. The leader changes movement to reflect operating different types of machinery.
- Organize a brush hunt for the children. Hide different types of brushes, such as paintbrushes, scrub brushes, and a variety of both large and small household brushes, and encourage children to find them and talk about what uses they have.

Science/Math



- Run cars down a tilted tube (gravity tube).
- Sort cars and trucks by color and size.
- Complete patterns on pattern cards with colored cars.
- Count activity folder games. Take cars to the garage.
- Use a pulley for lifting various objects.
- Provide real nuts, bolts, and tools for sorting.

Sensory



- Add cars and trucks to the sensory table.
- Add rocks to the sensory table.
- Place small tools in touchy feely bags for children to identify.
- Prepare play dough as usual. Add a few drops of extract such as peppermint, anise, or almond. Offer children a variety of scissors and other tools to help them make their play dough creations.
- Add wood shavings to the sensory table. Provide scoops and pails.

Literacy Links



- Make letter signs for roads and for “Tiny Town.”
- Design and make logs and signs for a cardboard big truck.
- Name and label the big vehicles in the block area.
- Name and make a sign for the Machine Repair Shop. Add order forms, receipt booklets, and writing implements to the shop.
- Make a song chart.

Related Books, Poems & Stories



- *Cars and Trucks and Things That Go* (R. Scarry)
- *Diggers and Dumpers* (N. Tuxworth)
- *Trucks* (D. Crews)
- *Trucks of Every Sort* (K. Robbins)
- *Usborne Book of Diggers and Cranes* (C. Young)
- *Usborne Trucks* (H. Caster)
- *Working Hard with the Mighty Loader* (J. Korman)
- *You Can Name 100 Trucks* (R. Chewning)

Related Software



- *HyperStudio* stack, "Big Trucks"
- Richard Scarry's *How Things Work in Busytown*
- *Toyland* (Fisher-Price)

Related Websites



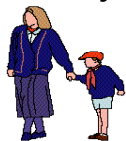
- www.thehomedepot.com
- www.bsc.auborn.edu/html/live.html
- www.fra.dot.gov/s/edu/index.htm

Extensions Beyond the Classroom



- Visit a local rock quarry.
- Take a field trip to a local machine shop or to an implement dealer.
- Take a tour through a school bus.
- Visit the fire department and ask to see the tools used by firemen.
- Invite community members who use different tools in their professions (e.g., street sweeper, artist, dentist, carpenter, animal groomer) to visit the classroom and talk about the tools they use.

Family Connections



- Ask children to bring in their favorite big vehicles for sharing.
- Encourage children to take home one of the transportation sacks for the week.
- Invite parents to attend the class field trips.

Invite a family member to come to class to talk about the tools he or she uses at work or at home.