TOYS: Tools for Growth

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Introduction

Toys are fun. But they are more. They are the tools of play that keep the child developing and learning.

In selecting toys, begin with your child. Match his interests and capabilities with a suitable toy—one that challenges him at his particular stage of growth.

Illustrations by Sally Isbell
Toys Serve Many Purposes in a Child’s Development

Toys are tools for motor development.

Then, as the child gains a sense of mastery, toys are tools for building one’s self-concept.

Because toys can stimulate self-activity in a child, they foster initiative and creativity.
Since toys afford varied learning experiences, they are tools for **fostering intellectual development.**

As children play together, toys are tools for **developing social concepts.**

Toys often provide a pleasant, non-destructive way of working off **excess energy** and working through **emotional conflicts.**
Motor Development

Toys can induce vigorous play and the large muscle exercise necessary to a child as he grows and develops physically. Motor control comes with the readiness of the body and the opportunity to practice. Watch a child bouncing on a board, riding a tricycle, or making a rocking horse go.

A child’s need for muscle coordination and strength is answered through his urge to be active, to drill himself intensely on skills... with equipment and time for practice.

Boards and boxes serve as the stimulus for activities that give muscles a workout, give practice in muscle coordination, and a chance to improve balance.

Children learn as they experience new movement skills in relation to space. Think of the various muscles that come into play as a child jumps, rides the big wheel toys, or pumps the swing.

(See Appendix—page 33, Jumping. page 34, Outside Activity.)
WITH ADULT SUPERVISION, CHILDREN CAN LEARN TO USE ADULT TOOLS.

A saw and hammer are not only satisfying for a child to use, but they also give him an opportunity for mastery through manipulation. Sawing and hammering may be ways he learns about building materials, and about what he as a person can do with them.

During the early years simply managing the equipment and material is important to a child and is his prime interest.

(See Appendix—page 27, Water and Sand.
page 30, Painting.
page 31, Dry Chalk and Crayons.
page 32, Play Dough and Hand Sculpture.
page 33, Construction.)
The very young child enjoys a pounding set. Even children old enough to use a real hammer, nails, and wood may still need the manipulative experiences. A little later, as muscles come under more accurate control and as the child has more ideas he needs to express, he will be ready to actually construct.

We wonder just what construction means to a child. Is it his way of putting his imprint upon his world?

(See Appendix—page 33, Construction Materials.)
PAPER AND CRAYONS ARE AMONG THE TOOLS FOR MANIPULATION.

At first a child seems content just to experiment with materials and with movement that crayons and large paper afford.

One day he will begin to name his pictures and these will be his representations of experience.

Coloring calls for hand-eye coordination, as well as finer muscle control.

Other toys that give finer muscles a chance to work might be puzzles with pieces to fit, small cars to maneuver, scissors with blunt ends, and paper for random cutting.

(See Appendix—page 27, Water and Sand. page 28, Housekeeping Equipment. page 30, Painting. page 31, Dry Chalk and Crayons. page 32, Play Dough and Hand Sculpture. page 33, Construction.)
When a child begins to walk, push or pull toys encourage him to exercise.

A sturdy baby walker serves as a push toy, but can also be used in a variety of ways...for loading blocks, or for riding himself or another child later.
Self-Concept

Toys are tools for building an idea of oneself.

John may feel powerful as he controls a wheel toy, or as he makes the wagon trail along behind.

Toys that are right for a child give him a sense of power.

(See Appendix—pages 30, 33, 34.)
As a child gains skills in mastering toys, equipment, or her body in relation to her physical environment, she gains self-confidence.

She is answering the question, "Who am I, and who am I like?"

As she plays with others her age, she may feel, "I can do things like Mary can."

"It is all right now that big people can do things I can't."
When an adult also recognizes and respects the need for the child’s play, the child feels that he is important.

Adults can provide the opportunity for a child to play at his own pace, to make mistakes without criticism, to build, to tear down, to explore, to experiment, and to test himself with his toys.

His concept of himself grows when he feels, "I know how to do it."
Initiative

Some toys are an invitation to create.

For the 3- to 5-year-old, his imagination is greatly expanded because of his ability to move around freely and to communicate.

With toys and materials these children use their emerging ability to imagine and create, and to express their developing power to organize. Toys that do only one thing, such as some wind-up or electric toys, make for passive watching and may not stimulate the child to be a participant.

How many things is a barrel to a child?

It is a rocket, it is for climbing, for hiding, for playing house.
HOW MANY WAYS MAY A BIG BOX BE USED?

A toy that can be used in more than one way encourages self-activity and initiative in the child.

One child may be engrossed in “painting” the big box outside with colored water. A box can also serve as a hide-away corner.

How much room is there in a box? Children learn, “Is there room for me, too?”

A ladder may be added to the box.

Some days it is for firemen.

It could be for the painter who improvises by using a helmet for a paint bucket.
Social Concepts

Toys stimulate friendships. A child sharing a toy often finds that he can talk more easily to another child and he, as an individual, gets a response. He feels "Jack likes me, too. This is fun!"
A doll is adaptable and can be used at all ages. One child puts it in bed or lays it in a carriage and wheels it around.

It is a symbol.

It should be simple without too many moving parts.

One child dresses and undresses it. Another washes it.

At 4 or 5, a child may use the doll to play house with dramatic imitations of family life as the child sees it.

Dramatic play offers a means of communication and cooperation just at the time social growth is beginning to accelerate.

(See Appendix—page 28, Housekeeping Equipment.)
Plastic sculpture material with several kinds of articles to add to it sets the stage for some interaction in a small group, but mainly for individual creative work.

Group experiences can help answer the question, "How do others see me?" and "How do others think about things in general?" Group play is one of the ways the child has of discovering how others think and feel, seeing what brings approval or disapproval.

Certain toys make for social interaction. Group play is suggested if there are enough similar toys for more than one child, as a tea set or dress-up clothes or a set of blocks or several tricycles.

Also certain pieces of big equipment can be used by more than one child. Some, such as teeter-totters, require cooperation.

(See Appendix—page 32, Hand Sculpture.)
Intellectual Development

Toys are tools for fostering intellectual development.

When we say “educational toys” many people tend to think of toys that teach symbols, such as numbers or the alphabet.

It is important to emphasize the first-hand experiences which are fundamental and a basis for later learning.

Sensory experiences come first and are the basis for later abilities to understand the abstract symbols.

There are some things a child just cannot learn except through the senses of touch, sight, hearing, taste, and smell.

Finger-painting is a sensory experience. One experiences slippery, cool, and red. (Finger-painting also helps a child feel free.)

(See Appendix—page 31, Finger-painting.)
Jane experiments with sound, the mechanics of a piano, and with her ability to make sound happen.

In this experience she may be given some labels and new meanings for things...as another kind of *key* or *hammer*...or *high* or *low*.

With an understanding adult nearby, she is learning about the world of sound through experimentation.

Language or the use of words is the tool of thinking which a child must have for thinking in abstract terms.
Is the guinea pig like a rabbit?
How is it different?

The adult helps the child see likenesses and differences—to gain words to go with ideas.

With words one organizes understanding by classifying into groups and classes.

What things go together?

(See Appendix—pages 29, 30, Science.)
Mary and Susan had an experience with a turtle.

They felt his hard shell.

They saw his movements.

Then Mary and Susan associate what they know about their little turtle with the symbols on a printed page.

After this real experience the picture and story about Timothy Turtle takes on new meaning.

One step in the child’s intellectual development is to deal with concrete experiences in terms of symbols and representations, such as pictures, songs, and stories.

(See Appendix—page 33, Words.)
Susan expresses her experience with the real rabbit as she wiggles the puppet’s ears.

Concrete experiences may also be expressed other ways—on the easel with paint..or in a dramatic play.

(See Appendix—page 30 Painting. page 31, Dry Chalk.)
We need also to discover ways to ask questions that will encourage experimentation, thinking, and concept building.

Sometimes curiosity is fostered by simply making toys available.

This child discovers some characteristics of a magnet.

She tries the nails.

She tries the paper.

Why do you suppose it won't pick up the paper? Or the mitten?

There is joy in learning when the interesting and appropriate materials are made available in an atmosphere conducive to discovery.
All people have feelings of hostility and aggression at times. One way to mental health is to handle these feelings in acceptable ways. The parent cannot let the child do harm to others, but the parent might help the overburdened child have a way to release his tensions in an acceptable way through play—sometimes called play therapy.

Messy activities, as water play, may especially help a child’s attitude toward toileting.

A child may spank a doll or put the child in the stove “to burn it up.” Another child may bury little plastic figures in the sand pile.

Pounding or banging or kicking activity may be used to release tensions, but these are more effective when the adult says something like, “I know how you feel,” or “I feel that way sometimes myself.”

A child who has a new baby brother or sister sometimes works through emotional conflicts in his play.

(See Appendix—page 28, Housekeeping Activity. page 27, Water and Sand. page 33, Jumping. page 34, Outside.)
APPENDIX

Play Materials and Activities for the Young Child

To the young child:
— Play is learning "What are things like in the world?"
— Play is learning "Who am I?" and "What can I do?"
— Play is the opportunity to carry out his own ideas.

The adult can help by encouraging and providing materials and activities for play.

Many parents find there are fewer guidance problems if they provide for the child's need to have sensory experiences, to manipulate and learn, to practice muscle coordination, to use his imagination and have materials with which to carry out his ideas. Providing play materials is one way to encourage a child's learning and to build pleasant, positive relationships in the home at the same time.
PLAY MATERIALS AND ACTIVITIES FOR THE YOUNG CHILD

WATER

*Some purposes:*
- Affords opportunity for child to learn properties of water.
- Relieves tension.
- Is fun.
- Use as part of props for imaginative play.
- Sensory experience.
- Provides legitimate "messing" e.g. mud pies.

*Some activities:*
- Float a "boat" in a tub or sink.
- Wash doll in dishpan.
- Wash doll clothes.
- "Tea party"—(to pour.)
- Water and sponge for cleaning.
- Egg beater and detergent in plastic bowl.
- Ice in a pan of water or sink.
- Bucket of water, paintbrush and fence.
- Play "What will float and what won’t float?"
- Water to mix in pail of sand and stir.
- To water flowers outside.
- In pitcher to water flowers inside.
- Hose and a trickle outside on a hot day.
- Various kinds of containers with lids and a sink.
- Bubbles—with juice can that has both ends out.
- "Cooking" e.g. mud pies.

SAND

*Some purposes:*
- Affords opportunity for child to learn properties of sand.
- Manipulate activity.
- Imaginative play.
- Social play (for several).

*Some activities or equipment to use in sandpile:*
- Old pot or pan for "cooking" or filling, or pouring.
- Spoons for stirring.
- Shovels for digging and shoveling.
- Cars or dump trucks.
- Water.
- Making tunnels, etc.

PROPS FOR IMAGINATIVE PLAY

*Some purposes:*
- Encourages carrying out of own ideas.
- Promotes communication with others.
- Opportunity to try on adult roles.
- Works off emotional energy.
PROPS FOR IMAGINATIVE PLAY (continued)

**Materials & Activities:**
- Cardboard boxes—with cut out windows, cardboard wings or propeller, etc.
- Stop sign for tricycles, etc., outside.
- Blocks.
- Barrel for rocket, etc.
- Feathers for Indians.
- Blanket for tepee.
- Record player for dancing, or rhythms.
- Hats for various roles.
- Farm animals of rubber, wood or plastic.
- Flashlight.
- Ladder or hose for fireman.
- Paintbrushes for painter.
- Cans and boxes, etc., for storekeeper.
- Suitcases for trips.
- Chairs for bus trip.
(See housekeeping equipment.)
- Small cars & trucks.
- His own hammer, nails, and soft wood.
- In housekeeping corner—crackers, or dry oatmeal, raisins, carrot sticks, apple slices, or cheese sticks for variety.

HOUSEKEEPING EQUIPMENT AND DRESS-UP CLOTHES

**Some purposes:**
- Dramatic play clarifies experiences and reduces anxiety.
- Dramatic play promotes feeling of identification with adult.
- Relieves tension.
- May encourage the social development of child by making communication and cooperation easier.
- Gives adult insight into what children are thinking and feeling.
- Helps learn roles of people in community.
- Increases child’s knowledge of household materials and skills in handling these so he is better able to care for himself and help with family activities.

**Some materials or activities:**
- Small table and chairs.
- Clothes & accessories:
  - Skirts to fit child loosely (might use velcro for fastener.)
- Old suitcase.
  - Hats—even for boys: fireman, milkman, cowboy, farmer, baseball, etc.
- Abstract props, as:
  - Wooden box.
  - Barrel.
  - Old blanket or sheet.
  - Ladder.
  - Kitchen equipment.
- Mirror to help him have knowledge of himself and to help his self-concept.
- Dolls and doll furniture.
- Plastic dishes and old pots and pans, plastic bottle with lids, plastic bowls, spoons, egg beaters, unbreakable "tea pots".
PASTING

*Purposes:*
- Creative artistic opportunity.
- Opportunity to feel and manipulate various kinds of textures.

*Some materials:*
- Old wallpaper book may serve as paper.
- Glosstex starch may be used as paste.
- Cloth scraps, all sizes and materials.
- Yarn.
- Old buttons.
- Toothpicks.
- Wood shavings or sawdust (may be colored with water and food coloring.)
- Eggshells (colored with food coloring in water, then dried and stored ready for use.)
- Paper scraps (cut in random shapes or circles, squares. etc.)
- Ticker tape.
- Leaves.
- Sand (may be colored).
- Sticks or twigs.
- Small gravel.
- Corn.
- Macaroni or spaghetti (may be colored).
- Feathers.
- Sprinkle-on glitter from a salt shaker.

For variety, it might be fun to paste things onto a round cardboard roller and stand it on its end to dry.

To emphasize the three dimensional effect, objects such as spools or bits of styrofoam may be interesting—to paste on a surface.

ON YOUR “SCIENCE” TABLE

*Purposes:*
- Intellectual stimulation.
- Language development and expression.
- To help build positive relationships in home.
- Helps increase confidence.

*Something to smell, as—* cinnamon, or cloves, or vinegar or onion.

*Or to taste, as—* lemon, sugar or salt or brown sugar.

An interesting activity might be to have a small glass of water. Let the child put in a spoon of sugar and stir. "Now is the sugar still there?" No? "Did you take it out, or is it still there?" "Taste it."

*Or to take care of and watch grow, as plants—*

*Activities:*
- Digging hole.
- Plant seeds outside or inside.
- Watering.
- Plant potatoes.
- Watch sweet potato in water grow.
- Put beans in a glass container and keep a paper towel "mulch" moist as the beans sprout.
Pets or animals, as—
Goldfish
Turtles
White rat in cage
Guinea pigs
Frogs
Cricket or grasshopper
Snails
Dog, cat

Or items of interest, as—
Shells
Nests
Rocks
Wood
Leaves
Magnet with nails, etc.
Flashlight
Binoculars

**Painting**

*Purpose*
Learning activity.
Releases tension.
Creative enjoyment.
Beginning of an activity that will have carryover value for later life.

**Materials and Activities:**

- Techniques with dry tempera—
  - Mix with water or glosstex starch for easel painting.
  - May sprinkle one or more colors on fingerpaint mixture as it is used.
  - May use to color sawdust or sand for use later.

- At easel—dry tempera, newsprint, with brushes.
  - For thicker paint, use starch instead of water.
  - For variedly

- Squirt bottle—Squirt "just the right amount" onto a paper, fold and unfold for a design.

- Stamp painting—Use objects of various shapes as spool, block, small can, objects made from styrofoam or potato, or carrot. Put paint into shallow container and use object to stamp an imprint on the paper. Muffin tin may be used for several colors at once.

- Sparkle painting—Coat paper with starch. Sprinkle on powder tempera. Several colors may be used. May touch up with fingers or brush.

- String painting—Use string to make design.

- Sponge painting—See stamp printing.
Finger painting. (See recipe below.)

May use directly on a formica surface. May use on a piece of butcher paper large enough for free movement.

Another intriguing technique is to put a fresh piece of paper on top of the "picture"—press and slowly remove to view another version of it.

Recipe: 1/2 cup Argo corn starch
1 cup cold water
2 cups hot water
1/2 cup mild soap flakes or synthetic detergent.
(1 envelope unflavored gelatine, if desired; not necessary but will give smoother texture.)

Combine corn starch and 3/4 cup of the cold water in a medium size saucepan; soak gelatine in remaining 1/4 cup cold water. Add hot water to starch mixture and cook over medium heat until mixture comes to a boil and is clear, stirring constantly. Remove from heat; blend in softened gelatine. Add soap or detergent and stir until mixture thickens and soap or detergent is thoroughly dissolved. Makes about 3 cups. Recipe may be multiplied.

DRY CHALK

Activities or Materials:

Old wallpaper book may serve as paper.
Paper towels may be used.
Meat trays also may be bought from the grocer.
Pour on buttermilk and spread thin before coloring with chalk. This gives a "gooey" feeling and a vivid color.
Vinegar may be spread over the paper before using chalk for a similar effect.
For a real experience, give the child an egg to break into his paper meat tray. There is much to see, feel and talk about before coloring.

CRAYONS

Materials and Activities:

Use paper large enough for freedom of movement.
For texture, place paper over an object such as a wire screen or pegboard. For older children a leaf might be used.
For another effect, unwrap crayon and use broadside. For special times an interesting variation of this idea is to cut "v" slots at different intervals on a crayon.
WITH WAX PAPER (OR CLEAR CONTACT PLASTIC)

Paste some of the following on waxpaper or put on clear contact plastic. Top with another piece. This is effective placed on a window so the light comes through. You might use: colored leaves, colored feathers, colored cellophane, or other material.

PLAY DOUGH

*Some purposes:*

To let child have sensory experiences.
To afford creative experience.
Releases tension.
Used as a prop at tea table or in imaginative play.
Practice in small muscle coordination.

*Material:*

Child may stir own ingredients and make if measured for him.

*Recipe:*

1 part salt
2 parts flour
1 part water
Food coloring.

Add food coloring to water before mixing with flour and salt. Should be refrigerated in plastic bag or Saran Wrap to keep soft and pliable.

HAND SCULPTURE

For sculptors or for just the fun of sticking things into a clump of sculpture material, use the Hand Sculpture recipe and anything handy that is fun to poke—toothpicks, macaroni, bits of broken tile, or old buttons.

*Recipe:*

1 cup Argo corn starch
1/2 cup cold water
2 cups table salt
2/3 cup water

Mix salt and 2/3 cup water in sauce pan; place over low heat, stirring constantly 2 or 4 minutes until mixture is heated. Remove pan from heat. Immediately mix corn starch and 1/2 cup cold water and add all at once to hot salt-water mixture. Stir quickly. The mixture should thicken to about the consistency of stiff dough. If mixture does not thicken, place pan over low heat again and stir about 1 minute or until mixture starts to thicken. Turn out on work surface and knead as you would dough. Use base immediately or store in a tightly closed container. Makes 1 3/4 lb. Recipe may be doubled if directions above are followed with one exception. Keep sauce pan over heat when the corn starch and water are added to the hot salt and water mixture. How to color: Use food coloring or tempera paint. Add to salt-water mixture in amount desired.
WORDS

**Some purposes:**

Values are:
1) As outlet—to release tension.
2) For social development or communication.
3) For intellectual development or equipment for thinking.
4) As creative expression and enjoyment.

**Some activities or equipment:**

- Puppets.
- Toy telephone.
- Record player and records.
- Stories.
- Pictures and conversation.
- Cutting pictures and “making a book”.
- Library.
- Using nonsense words.
- Trips—for experiences and new words and expressions.
- Game—“What is it?” or “I spy” as description is given.
- Conversation at snack or dinner or anytime.
- Imaginative play with other children.

CONSTRUCTION MATERIALS

**Purposes:**

- For learning concepts such as shape, size, weight, numbers, etc.
- For learning what he can do and to give a sense of power.
- Improves muscle coordination.
- For creative and imaginative play, for releasing tension.
- For social play with another child.

**Some materials:**

- Blocks—unit blocks (2” x 2” x 1”) hardwood.
- Hollow blocks (6” x 12” x 4”)
- Wooden boxes
- Boards
- Sawhorses
- Milk cartons
- Construction paper, blunt scissors, stapler or tape (for making Indian hats, etc.)

FOR JUMPING

**Purposes:**

- Practice in big muscle coordination.
- To relieve tension.
- For fun.
- For fun with others.

**Some materials:**

- Jumping tube (tractor or airplane).
- Wooden Box.
WOODEN BOX

*Purposes:*

- Big muscle activity for coordination.
- Construction piece.
- Imaginative play.

*Activities:*

- Jumping off.
- As hideout or house, or boat or zoo cage.
- Add old blanket.
- Add ladder—and play fireman or climbing.
- Add board for walking or sliding.

OUTSIDE

- Teetertotter.
- Sandpile.
- Tricycles.
- Wagons.
- Climbing gym.
- Wooden Box.
- Boards.
- Barrels.
- Wheelbarrow.
- Shovel.
- Hose.
- Ball.
- Swing.
- Tractor tire or airplane tire.
- Slide.

RELATED AUDIO-VISUAL MATERIALS

The following coordinated materials are available from 1-98 Agriculture Building, University of Missouri.

- 15 minute video tape - "Toys, Tools, for Growth", Collage No. 43
- 15 minute kinescope - "Toys, Tools, for Growth", Collage No. 43
- 5-five minute audio-tapes
- News releases
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