Lekotek
A division of Anixter Center

Messy Play: Bubbles, Dough, Sand and Water

Note: These suggestions are to be used only with children who no longer mouth objects and should be played with only under the direct supervision of an adult.

Bubbles

Here are some ideas for tools you can use to make great bubbles:

- Plastic 6-pack beverage holders
- Plastic coat hangers
- Funnels
- Canning rings
- Pipe cleaners (looped tightly)
- Fly swatter (makes thousands of mini bubbles!)
- Cookie cutters
- Straws
- Slotted spoons
- Yarn tied to a stick
- Wire twisted into fun shapes

For all bubble recipes, gently stir all the ingredients together in a big plastic container. Glycerin can be found in most drug stores. The skin of the bubbles will be stronger in proportion to the amount of glycerin added to the soap and water mixture.

Recipe #1

1 gallon water
1 cup dish detergent (more expensive brands allow for stronger, better bubbles)
Glycerin

Recipe #2

4 gallons Mr. Bubbles$_{TM}$ Bubble Solution
1 quart glycerin
1 quart liquid dishwashing detergent
1 quart water

Recipe #3

1 8 oz. container of Mr. Bubbles$_{TM}$ Bubble Solution
1 oz liquid dishwashing detergent
6 oz. water (distilled is the best; do not use hard water.)
1 oz. glycerin

Bubble Recipes #1, #2, and #3 are reprinted from Professor Bubbles' Official Bubble Handbook by Richard Faverty.

Recipe #4

1/4 cup liquid dishwashing detergent
1/2 cup water
1 teaspoon sugar
Few drops of food coloring

Bubble Recipe #4 is reprinted from L.R. Morris and L. Schultz, 1989, Creative Play Activities for Children With Disabilities, 2nd Ed., (Champaign, IL: Human Kinetics Publishers).

Recipe #5

1 cup liquid dishwashing detergent
2 cups warm water
3-4 tablespoons glycerin
1 teaspoon sugar

Bubble Recipe #5 is reprinted from Prime Time Together...With Kids by Donna Erickson, 1989 Augsburg Fortress.

Doughs and Clay

- Cookie cutters
- Knife
- Little toy people
- Wooden pegs
- Bottle caps
- Toothpicks
- Magnetic letters
- Garlic press
- Golf tees
- Play tools
- Small plastic animals
- Popsicle sticks
- Leaves (to make fossils)
- Rolling pin
- Shape sorter shapes
- Marbles (to hide inside)
- Cheese grater
- Buttons
- Stones (from outside)

Messy Play: Bubbles, Dough, Sand and Water ...*(continued)*

Recipe #1 Play Dough

1 cup flour
1 cup water
1 tablespoon cream of tartar
1 cup salt
Food coloring, tempera, Kool-aid, or Jell-O (or leave natural color)

Dough Recipe #1 is reprinted from Scribble Art by MaryAnn F. Kohl.

Recipe #2 Salt Dough

2 cups cornstarch
4 cups baking soda
2 1/2 cups cold water

Measure the cornstarch and the baking soda into a pot. Mix and add the water. Place on medium heat. Stir for about 5 minutes, until the mixture thickens. Remove from the heat. Cover the pot with a wet paper towel. When cool, knead for about 5 minutes, working on a surface covered with wax paper. (If left out, dough will air-dry hard.)

Recipe #3 Salt Dough

2 1/4 cups water
2 cups salt
3 cups white flour
1 cup whole wheat flour

Bring the water to a boil in a saucepan. Remove from the heat and stir in the salt. Mix the flours together in a large bowl. Add the salt water to the flours and stir. Knead on a flour-covered surface. Mold into objects. Bake the finished objects on a cookie sheet at 250 degrees for 2 to 3 hours. Check your objects every 20 minutes after the first two hours of baking. When cool, decorate with tempera, acrylic or colored marking pens. Spray with clear acrylic finish to protect and preserve.

Recipe #4 Salt Dough

1 cup salt
1/2 cup cornstarch
3/4 cup cold water

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Stir all ingredients together over low heat. Stir constantly to prevent burning. In 2 or 3 minutes it will thicken and can no longer be stirred. Turn out onto waxed paper or aluminum foil and cool. When cool, knead until smooth. If the dough dries out, add some water. This recipe makes nice ornaments that are rolled and cut with cookie cutters or designed freehand. Allow to air-dry.

Dough Recipes #2, #3, and #4 are reprinted from Kids Create! by Laurie Carlson.

Recipe #5 Edible Play Dough - Mix well, play with it, then eat it!

1 cup smooth peanut butter
2/3 cup Rice Krispies
1 cup powdered milk

Dough Recipe #5 is reprinted from Recipes for Fun by Joseph P. Kennedy Foundation.

Recipe #6 Play Clay

1 cup flour
1/2 cup salt
1/4 cup water
Food coloring

Mix flour and salt, then slowly add colored water. Knead well. Objects made from this mixture can be left out to harden. Store unused clay in an airtight container.

Clay Recipe #6 is reprinted from L.R. Morris and L. Schultz, 1989, Creative Play Activities for Children With Disabilities, 2nd Ed., (Champaign, IL: Human Kinetics Publishers).

Recipe #7 Sawdust Clay

2/3 parts fine sawdust (any kind except redwood)
1/3 part flour
Water

Mix sawdust and flour together. Pour in the water and mix until is reaches a stiff, but ÒsquishyÓ consistency. Add more flour if it is too crumbly. Knead very well so clay becomes elastic.

Clay Recipe #7 is reprinted from Kids Create! By Laurie Carlson

Paints

Use freezer paper (available at your grocery store) instead of special finger paint paper. It works just as well and it is much cheaper. Add the following materials to make textured paints: sand, salt, coffee grounds. Here are some household items to use when "painting:"

- Sticks
- Sponges
- Hands, feet, elbows
- Yarn ball
- Plastic toys
- Checkers
- Toy cars (to make tracks)
- Feathers
- Turkey baster
- Empty spools
- Seashells
- Wooden blocks
- Cotton balls
- Feather duster
- Gadgets
- Q-tips
- Dominoes

- Corn on the cob (roll in paint then roll across paper)
- Marbles (tilt cardboard to roll paint-dipped marbles)
- Potatoes (cut in half, carve out shape)

Recipe #1 Finger-paint

Paste or liquid starch
1-2 tablespoons soap flakes
Food coloring or tempera paint

Mix ingredients together in a bowl. Then whip with a beater. Fill small containers with paste or starch mixture, adding more food coloring or powdered paint for bright color.

Recipe #2 Finger-paint

Mix liquid starch and powdered tempera paint on the paper as you paint.

Paint Recipes #1 and #2 are reprinted from Scribble Art by MaryAnn F. Kohl.

Recipe #3 Finger-paint

1 cup liquid starch
6 cups water
Food coloring
1/2 cup soap flakes (not detergent)

Dissolve the soap flakes in 2 cups of water until no lumps remain, then mix well with the starch and remaining water. Pour equal amounts into containers, one for each color, and add food coloring. You may add powdered paint to the mixture.

Paint Recipe #3 is reprinted from L.R. Morris and L. Schultz, 1989, Creative Play Activities for Children With Disabilities, 2nd Ed., (Champaign, IL: Human Kinetics Publishers).

Recipe #4 Finger-paint

3 tablespoons sugar
1/2 cup cornstarch
2 cups cold water
Food coloring
Soap flakes or liquid dishwashing detergent

Mix sugar and cornstarch in a medium saucepan over low heat. Add 2 cups cold water and continue stirring until the mixture is thick. Remove from heat. Divide the mixture into 4 or 5 portions, spooning them into sections of a muffin tin or small cups. Add a drop or 2 of food coloring (a different color for each cup) and a pinch of soap flakes or a drop of detergent to each portion. Stir and let cool. You're ready to paint! Paint can be stored in airtight containers.

Recipe #5 Homemade Face Paint

1 teaspoon cornstarch
1/2 teaspoon water
1/2 teaspoon cold cream
Food coloring

Stir together the cornstarch and cold cream until well blended. Add water and stir. Add food coloring, one drop at a time until you get the desired color. Paint designs on faces with a small paintbrush; remove with soap and water. Face paint can be stored in covered containers.

Messy Play: Bubbles, Dough, Sand and Water ...*(continued)*

Recipe #6 Shaving Cream Bath Paint

Can of shaving cream
Food coloring

Squirt shaving cream dollops into each section of a muffin tin. Add a couple of drops of food coloring into each section and mix together with a spoon. Place the tin where kids can reach it while in the bathtub. Let them dip their fingers, hands or sponges into the paints and create pictures on the wall and tub. When bath time is over, be sure to rinse away the paint with water.
Paint Recipes #4, #5 and #6 are reprinted from Prime Time Together...With Kids by Donna Erickson, 1989 Augsburg Fortress.

Recipe #7 Puffy Paint

Equal parts of flour, salt, and water
Liquid tempera paint

Mix equal parts of flour, salt and water in a bowl. Add liquid tempera paint for color in desired amount. Pour into plastic squeeze bottles. Squeeze mixture onto cardboard or heavy paper. Mixture will harden in a puffy shape. Colors will pool together without mixing.

Recipe #8 Shiny Paint

Tempera paint (liquid or powdered)
White glue

Pour white glue into cups. Mix paints into each cup, stirring with a brush. (HINT: if you use powdered paint, you may have to thin the mixture with a little water to paint easily.) Paint on wood, paper or cardboard and when dry, it will be shiny as if glazed.

Recipe #9 Salt Paint

1/8 cup liquid starch
1/8 cup water
1 tablespoon tempera or 2 squirts food coloring
1/2 cup salt

Mix liquid starch, water, paint or food coloring and salt. Paint onto paper plate, matte board or cardboard. Keep stirring mixture. Paint will crystallize as it dries.
Paint Recipes #7, #8 and #9 are reprinted from Scribble Art by MaryAnn F. Kohl.

Recipe #10 Sparkle Paint

Equal parts of flour, water and salt
Tempera paint

Find empty squeezable bottles. Mix equal parts of flour, salt and water. Pour some of the mixture into each squeeze bottle. Add tempera paint to each bottle and shake well. Squeeze the paint onto the paper, creating a picture. Let dry. When the paint is dry, the salt makes the picture sparkle. You may also use a brush to make a picture rather than squeezing the bottles.
Paint Recipe #10 is reprinted from Kids Create! by Laurie Carlson

Recipe #11 Pudding Paint

1 package pudding mix

Prepare pudding as directed. Put approximately a 1/2 cup of the pudding on a smooth surface (e.g. acrylic cutting board). Explore the pudding with hands and fingers, just as if you were finger-painting. Use a Popsicle stick to make designs.
Paint Recipe #11 is reprinted from L.R. Morris and L. Schultz, 1989, Creative Play Activities for Children With Disabilities, 2nd Ed., (Champaign, IL: Human Kinetics Publishers). .

Homemade Goop and Gak

Goop Recipe

1/2 cup cornstarch
1/4 cup water
Food color or tempera

Mix cornstarch and water and color. (You can make a whole water table full keeping the ratio of cornstarch to water 2:1). Pour onto trays or into a tub. Observe and explore. There will be no finished product -- just exploration and fun. It can be reused, just store in an airtight container.
Goop Recipe is reprinted from Scribble Art by MaryAnn F. Kohl.

Gak Recipe

10 oz. water
10 oz. white glue
1 dash of Borax (liquid or powder)
1 drop of food color

Mix water, Borax and food color. Add glue and mix. Put in a jar (plastic or glass) and cover for 1 hour.
Gak Recipe is suggested by the Lekotek in Puerto Rico.

Not-So-Messy Play

Squeezy Weezy

Clear plastic recloseable bags (e.g. Ziplock)
Finger-paint or mustard, ketchup and mayonnaise
Q-Tips, popsicle sticks, spoons

Put small amounts of ketchup, mustard, mayonnaise or finger-paint in Ziplock bags-- enough to completely fill the bag when flat. Seal the bags. Now squeeze and press the paint in different directions to make unique designs. Use Q-Tips, Popsicle sticks or spoons to create different patterns. Erase any painting by smoothing over the bag with your fingers.
Squeezy Weezy is reprinted from Recipes for Fun by Joseph P. Kennedy Foundation.

Bag Me A Rainbow (Rainbow Goop)

One 1-quart heavy-duty resealable plastic bag
3/4 cup water
1 package unflavored gelatin
Red, yellow and blue food coloring
3 custard cups or bowls
Masking tape

In a small saucepan stir together water and gelatin. Let stand for 5 minutes to soften the gelatin. Cook and stir over low heat about 3 minutes or till the gelatin dissolves. Remove from heat. Divide the mixture evenly among the 3 custard cups (about 1/4 cup each). Add 3-5 drops red food coloring to 1 of the custard cups. Stir to mix well. Repeat

with the remaining gelatin with yellow and blue food coloring. Chill in the refrigerate 5 minutes or until partially set, stirring mixture during chilling. Open the plastic bag. Use a spoon to put all 3 colors of Rainbow Goop inside the plastic bag. Close the bag. Now open it just a little and push out all the air. Close the bag again. Seal the top with masking tape. Now, squeeze

the bag to mix the colors into a beautiful rainbow. Watch how the different colors mix to create new ones (e.g. red and yellow make orange).
Rainbow Goop is reprinted from Better Homes and Gardens Water Wonders, "A Fun Projects for Kids To Do" Book.

Alternative to Sand

In your sandbox, sand and water table, Tupperware tub, or pot try using these materials (all uncooked) instead of sand. They lend themselves to new textures to feel, new imaginations to think and new pretend play possibilities to create!

Rice	Cornmeal	Oatmeal
Pasta	Unpopped popcorn	Shredded Easter basket grass
Wild birdseed	Beans (pinto, black-eyed, lima, etc.)	
Clean mud (toilet paper, Ivory Soap Flakes and water)		

Sand Play Enhancers

Plastic animals	Play pots and pans	Kitchen utensils
Popsicle sticks	Toy cars	Plastic people
Measuring cups	Sifters	Barbie dolls

Water Play Enhancers

Kindle interest and stimulate the imagination by changing water play equipment frequently. Enhance play with objects from home, school and nature. Here is a brainstorming start!

Stoppers	Empty spice cans	Pasta and seeds
Soup ladle	Milk cartons	Golf tees
Bulb baster	Netting	Film cans
Slotted spoons and whisks	Plastic people and animals	Marbles
Ping pong balls	Plastic ruler	Magnets

Water Play Enhancers Continued

Margarine tubs	Buttons	Bar soap
Dish detergent	Leaves	Sieve
Popsicle sticks	Thread spools	Foil balls
Measuring cups	Food coloring	Corks
Egg beaters	Cooking tongs	Sponges
Thermometer	Feathers	Canning rings
Packing "peanuts"	Scoops	Small pitchers
Rubber washers	Tennis and golf balls	Squeeze bottles
Medicine dropper	Fishing bobbers	Lids
Rubber gloves	Toy boats	Salt shakers
Bottle brushes	Styrofoam meat trays	Funnels Graduated containers Sugar shaker
	Wood scraps	
Strainer	Plastic eggs	Aquarium nets

Water Play/Sand Play

Water and sand are basic play materials for children. Similar to play dough and blocks, water and sand play do not require prerequisite skills to enjoy the activity. There are no reading, color matching or other cognitive skills that need to be an underlying foundation. There is no one correct

way to play. That is not to say that learning does not occur with water and sand play; it most certainly does. Water and sand play allows for experimentation and exploration while fostering the development of physical movement, cognitive thinking and problem solving skills. It also increases opportunities for social play and the associated skills of turn taking, sharing and communication. Below are a few ideas for enhancing development in the suggested areas:

Speech and Language
Use words to describe the actions you are doing with the water/sand or with the toys in the water/sand, such as: empty/full, pour/scoop; heavy/light; spill/fill; splash; swim; drink.
Introduce pretend play by acting out a story. For example, pretend plastic animals are at the zoo taking a drink at the water hole or use play pots and pans to cook a wonderful "meal" using uncooked beans and rice.

Physical Movement
Children use large muscle movements to lift heavy buckets or to create a whirlpool effect by making large circles in the water. Small muscles can also receive quite a workout by pouring and scooping with cups, squirting with squeeze bottles, fishing for plastic fish with an aquarium net, or by experimenting with any of the list of Water Play Enhancers or Sand Play Enhancers on page 6.

Social Skills
Children can play together at a sand and water table or tub, provided the space is large enough for social play to take place comfortably. Using the same Water Play or Sand Play Enhancers, children can parallel play. Have an assortment of enhancers for children to choose from and assist in sharing and taking turns. Pretend play can also be a group effort by acting out one story line.

School Skills
Math and science can be incorporated into water and sand play. Concepts such as heavy/light; same/different; greater than/less than; liquid and dry measurements; and counting can be learned and observed with the use of water and sand. Water displacement, properties of water and water usage can also be a part of water play exploration.