# Play Dough Power





# Notes





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## Play Dough Power

Play dough is multi-sensory, engaging, creative, and open-ended. Talk about PURPOSEFUL PLAY! Play dough can be a learning tool just like a worksheet, video game, or PPT. Although play dough wasn't invented until the 1950's, molding materials, such as clay, have been an integral part of early childhood programs forever. For thousands of years

children have played with mud and sand joyfully. Play dough is a natural and meaningful way for children to learn as they play, have fun, and interact with their friends.

## Why Use Play Dough?

#### Brain Research

When children tap and swipe on a device or sit passively gazing at a big screen, there is little sensory input in the brain. We know that the only way information can get IN the brain is



through the senses. Think about how much more input there is when children touch, see, talk, and hear as they manipulate play dough.

#### Small Motor Skills

Pinching, squeezing, rolling, and molding dough are like sending little fingers to the gym. Many children's small muscles are not developed and they struggle to hold a pencil and write. Play dough strengthens muscles and encourages bilateral coordination where both hands coordinate and work together.



#### Social Skills

All you have to do is put out some play dough for a small group of children and observe. They will learn to share and spontaneously communicate with their friends about what they are making. They'll also challenge their friends to be creative.

#### **Emotional Skills**

Play dough is a great release for children who are stressed or have the fidgets. As they manipulate the material they can release pent up energy and calm themselves. Play dough can provide a tangible form for self-expression.

## **Imagination**

So many crafts and projects we give children have steps and are not open-ended. Play dough is a blank canvas that can be turned into anything from a monster to a fairy to an elephant to a cupcake! Whatever the child creates is theirs and represents the "process" rather than the "product."

#### **STEM**

With play dough and simple tools like toothpicks and plastic knives, children can plan, problem solve, and construct over and over.

#### Success

Is there a wrong way to use play dough? Absolutely not! It's "all good" and children of all abilities can have fun and feel positive about what they are doing.

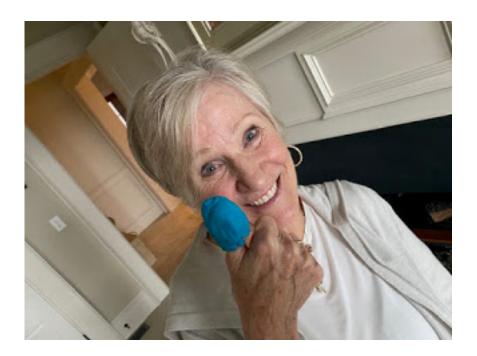
#### Academic Skills

Besides all the social and physical benefits of play dough, this booklet is packed with ways to reinforce skills with play dough.



## The WHOLE Child

Clearly, play dough is a powerful way to teach the WHOLE child socially, emotionally, physically, and intellectually! It exemplifies developmentally appropriate activities and active learning to integrate academics and what is BEST for children!



## PLAYING MAKES YOU SMARTER!

## THUMBS UP FOR PLAY DOUGH!

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## Recipes - Homemade Play Dough

I've been cooking up this play dough for almost 50 years! I've tried others, but it's still my favorite.

2 cups all purpose flour1 cup salt2 TB. cream of tartar2 TB. vegetable oil2 cups waterfood coloring

Mix all the ingredients together in a pan and stir until smooth. Cook over medium heat stirring constantly until the mixture forms a ball and sticks to the spoon. Cool and knead. Store in plastic bags or covered containers.

\*You can cut the recipe in half for one or two children.



**Note!** I made this in my classroom with an electric skillet. I let the children add all the ingredients and stir before turning on the skillet so they wouldn't get burned.



## **Variations**

- \*Add oil of mint or other extracts to play dough to give it a fragrance.
- \*Use 2 TB baby oil or massage oil in place of the vegetable oil.
- \*Unsweetened Kool-aid mix can be used in lieu of food coloring. The flavor will add a sweet aroma!

## Bisquick Play Dough

- \*This is Carolyn Kisloski's favorite.
- 2 Cups Bisquick
- 1 Cup salt
- 2 Cups water
- 1 TB Cream of Tartar
- 1 TB Oil

Mix all ingredients in a microwave safe bowl. Microwave for 3 minutes. Scrape and stir the bowl. Microwave for another 3 minutes. If not quite ready then microwave for another minute.



## Play Dough Center

An open play dough center will provide children with the freedom to be creative and use their imaginations!

#### Materials

Play dough
Craft sticks
Toothpicks
Plastic utensils (knife, fork, spoons)
Cupcake papers, birthday candles
Buttons. googly eyes
Rolling pin (or cylinder block)
Natural items (shells, sticks, leaves, feathers)
Cookie cutters
Scissors
Straws, pipe cleaners
Small toy animals
Seasonal or holiday objects

\*Vary the items in the center, introducing one or two at a time.





## Hints and Suggestions!

Lunchroom trays, cookie sheets, or plastic mats (placemats) will help keep play dough in a defined space.

Have simple rules. For example:

Keep the play dough in your space.

Share the materials.

Clean up when you are finished.

Use one color at a time.

Children should wash their hands before and after using play dough.

Beware of allergies and offer gluten free dough, fragrance free dough, etc.

Some classrooms like to provide individual containers of play dough for each child. A parent volunteer makes a new batch of dough each month with personal bags for children.

With younger children model how to use the different tools and items.





This would be a good independent activity, but it would also be an excellent suggestion for parents to make for their child to use at home.

Plastic tub
Play dough
Cookie cutters
Scissors
Pipe cleaners
Toothpicks and popsicle sticks
Small muffin tin
Small rolling pin
Birthday candles

Hint! Rotate materials putting out 2 or 3 at a time.





## Squeeze a Color

Take a small ball of homemade play dough that is not colored. Poke a hole in it and add a few drops of food coloring. Squeeze the hole to seal it. Hand it to a child and challenge them to squeeze it and find a surprise.



\*Make balls with primary colors (red, blue, yellow food coloring). Can children share a pinch with a pinch from their friend to squeeze and make a secondary color?





## Dinosaur Eggs

Roll play dough into an egg shape around small plastic dinosaurs. Children pinch away the play dough to reveal the surprise.

\*Hide other small objects in play dough. Give children toothpicks, tweezers, etc. to remove the dough.



# Play Dough Gym (Small Motor Skills)

Play dough gets those little fingers ready to write and do other small motor activities. Try these simple exercises:

## **Pancakes**

Flatten it with your hands to make a pancake.



## Snakes

Roll it and make a snake.

\*Use the snakes to make lines, curves, shapes, and letters.



## Snip and Cut

Give children safety scissors and let them practice cutting play dough.

\*Use a plastic knife and other utensils to cut dough.



## Poke and Pinch

Poke the play dough with your fingers.

Pinch off pieces of the dough.

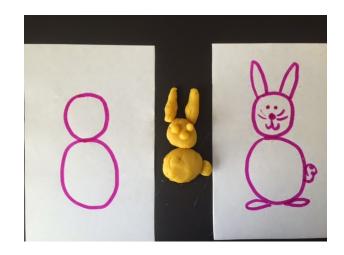


Squeeze
Squeeze the dough.
Make a ball and then
squeeze it again.



**Copy Cats**Make rabbits, bears, and other objects with play dough. Challenge the children to copy your design.





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## The Play Dough Book

1. Write "Can you make lines?" at the top of one folder.

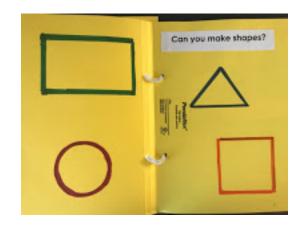
Make lines similar to the one shown.



2. Draw curves on another folder and write "Can you make curves?" at the top.



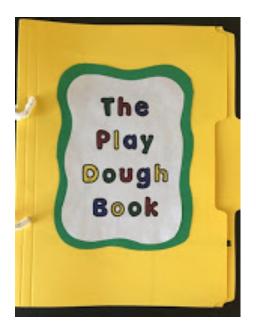
3. Make shapes (square, rectangle, circle, triangle) on another folder and write "Can you make shapes?"



4. Draw simple objects (nest and eggs, hotdogs, bunny, etc.) on the last folder and write "What else can you make?"



5. Punch holes in the folders and attach with book rings.



6. Place the book in a center with play dough and challenge the children to roll the dough and place it on top of the lines and shapes.



## PLAY DOUGH PLATES

You can reinforce skills and strengthen small muscles at the same time with play dough plates. They are perfect for a learning center or independent activity.

Materials: plastic plates, play dough, permanent marker

#### Letter Plates

Write letters on the plastic plates with a permanent marker. Children roll the play dough and place it on top of the letters. Challenge them to make something that starts with that sound.

Note! I traced around the letter on the front and back of the plate. You can use upper case letters, lowercase letters, or both.





#### Number Plates

Write numbers on plastic plates. Children can roll play dough and place it on top of the numbers and then make sets to equal that amount.

\*Challenge children to make different combinations of that number.



Hint! Add paper, crayons, and pencils to these plates so children can practice writing the letters and numbers after reproducing them with play dough.





## Shape Plates

Make shape plates for the children to reproduce.



## Lines and Curves

Children can also practice making lines and curves on the plates





## Play Dough Mats

There are many different types of play dough mats that you can download FREE on the internet. Children can match play dough with graphics one-to-one, reproduce letters and numbers, and so forth. Laminate these or put them in clear sheet protectors.



## Play Dough Reading

Play dough can be used to reinforce reading skills just like a worksheet or workbook.

## Alphabet Knowledge

Imprint magnetic letters in play dough.

Can they make the sound?

Can they make something with the play dough that begins with that sound?

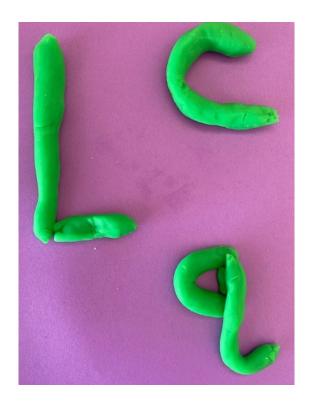


\*Challenge children to write letters in play dough with a golf tee or pencil.



\*Have children roll snakes with play

dough and then make letters.



## Phonological Awareness

Ask children to make two objects that rhyme.



## **Phonics**

Make objects that start with a consonant, blend, or diagraph you are working on.

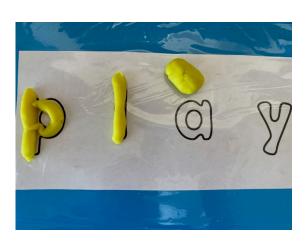
\*Let children play a game with a partner where they make a letter or object and their partner has to guess what it is.



## Sight Words

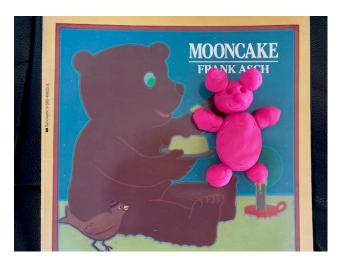
Make sight words using a bubble font. Children roll dough and fill in.

\*Have children write the word after making it with play dough.



## Comprehension

Let children make their favorite character and use it to retell a story.



Draw a scene from a story and add details with play dough.

#### Non-fiction

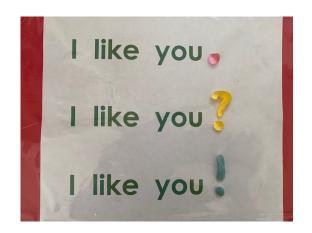
After reading a non-fiction book, challenge children to make something that they learned from the book.

## **Punctuation**

Make punctuation marks out of play dough. Add to a sentence for a friend to read.

## Writing Prompt

Make something you like (or don't like) and write about it.



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Another Free Document from Dr. Jean

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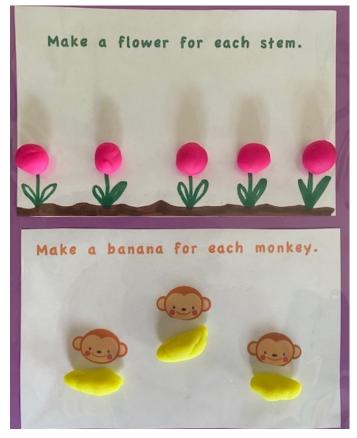


## Play Dough Math

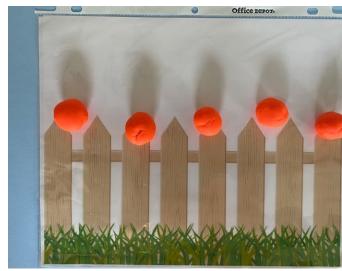
Play dough can definitely make math concepts more meaningful because it provides the "concrete" experiences that children need.

## One-to-One Correspondence

Children can use play dough to match one-to-one.



\*Adapt to seasons or units of study.





## **Number Recognition**

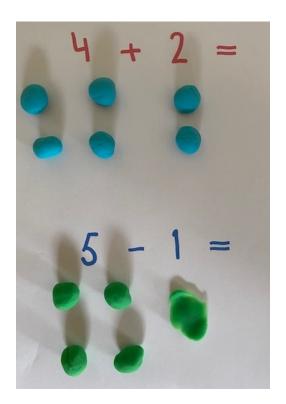
Children roll a die and then make that number of play dough balls.

\*Children can also make the numeral with play dough and then write it.



## Operations

Let children use play dough to work out addition and subtraction problems.





## Part, Part, Whole

Can children decompose a number using play dough?



## Geometry

Ask children to make lines, curves, and simple geometric shapes.

Can they create solid (3-d) shapes?

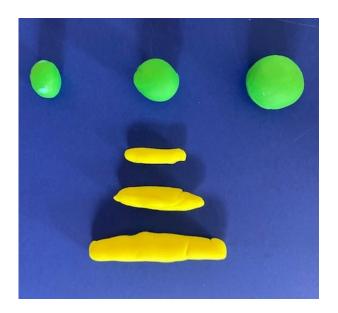




#### Measurement

Make something from play dough and then describe its weight and height. Can you make it longer? Shorter?

\*Use play dough to make balls that are small, medium, and large. What else can they make in three sizes?



## More, Less, Equal

Write "more," "less," "equal" on three index cards. Children roll a die and then choose a card and make a set that is more, less, or equal to the amount on the die.



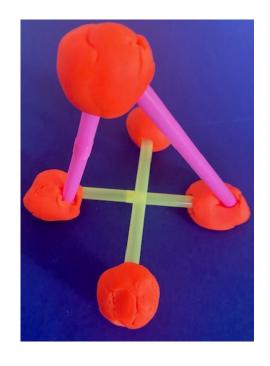
\*Two children can play a similar game called SQUISH. One child squishes the dough and makes a set. The second child selects a card and then must squish the play dough to make a set "greater," "less than," or "equal."

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## Play Dough STEM

Little brains will light up and use engineering skills as they problem solve and create with play dough. Give them simple tools like toothpicks, scissors, knives, popsicle sticks, etcetera and they can play and construct over and over again.

# Straws and Pipe Cleaners Add straws and pipe cleaners to play dough and see what 3D structures children can come up with.



## Art Media

Provide children with googly eyes, buttons, feathers and other art media to create 3D creatures.



#### Science and Social Studies

Reinforce information from a science or social studies unit with play dough. Children could make animals from a habitat, parts of a flower, tools of community helpers, healthy foods...endless possibilities!

\*This earth is made from a blue ball (ocean) and little pinches of green play dough (continents). Roll in your hands.



#### **Prints**

Make prints of leaves, shells, pinecones, rocks, tree bark, feathers, nuts, etc. in play dough and compare. Encourage children to describe the differences.



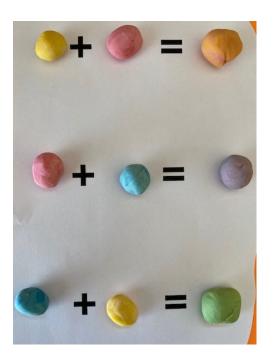
#### **Habitats**

Collect leaves, twigs, rocks, shells, pinecones, nuts, and other natural objects. Children can create different scenes using the play dough and plastic animals.



#### **Colors**

Make play dough with the primary colors (red, yellow, blue). Can children take pinches of the primary colors and squeeze them to make the secondary colors?



#### **Insects**

Let children create bugs out of play dough and sections of pipe cleaners. Encourage them to name the parts of their insect (head, thorax, abdomen, legs, antennae).



#### Show What You Know

After a unit of study give children a handful of play dough and ask them to mold something that they've learned. Encourage them to use their sculpture to explain what they've learned to their friends.

\*Read a non-fiction book and then ask children to make something they learned with play dough.

Use these links for additional materials:

Cards

http://bit.ly/drjeanInsectCards4perpage

YouTube Videos:

http://bit.ly/drjean\_Insect\_01 http://bit.ly/drjeanInsects

Includes download link in description.

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## Sing and Say Play Dough Activities

The Play Dough Song Tune: "Row, Row, Row Your Boat" (Children make the motions with the play dough as they sing.) Squeeze, squeeze play dough (Children squeeze dough.) Feels so good to me.
Squeeze, squeeze play dough

Poke - Poke fingers in the dough.

Pinch - Pinch off pieces of the dough.

Roll - Roll the dough into a snake.

Pat – Pat like a pancake.

Hint! It will be helpful if the teacher models these movements.



It's easy peasy!







<sup>\*</sup>Sing each verse several times to give children the opportunity to reproduce the movements.



## Finger Plays

Children can represent finger plays with play dough.

## Cookies

Down around the corner

(Make 5 cookies/pancakes.)

At the bakery shop,

Five little cookies

With sugar on top.

Along came (child's name)

With a penny one day.

She bought a cookie and

(Remove one cookie.)

She took it away.

Four...three...two...one...



## Apple Tree

Way up high in the tree,

(Roll one ball.)

One red apple smiled down at me.

I shook that tree as hard as I could.

Down came an apple,

Mmm! Mmm! Good!

Continue by saying "two red apples," and then "three red apples," etc.



## Nursery Rhymes

Challenge children to make characters from familiar nursery rhymes and then repeat the rhymes.



\*Can they make a "plum" on their thumbs they say ""Little Jack Horner"?



## Name That Tune

Have children make objects from a favorite song. Can friends guess what it is? Let children give hints by humming the tu

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## PLAY DOUGH FOR ALL SEASONS

There are countless ways that you can add sensory materials and props for different holidays and seasons.

#### Fall

Make orange play dough (red and yellow food coloring) and add pumpkin spice. Provide pie pans and other kitchen utensils.

Give children nuts, leaves and other natural items to imprint into dough.



## Christmas

Put out cookie cutters and other small holiday decorations for children to explore.



#### Winter

Make snow dough by adding iridescent glitter to uncolored play dough

#### **Valentines**

Omit the food coloring and let the children knead in cocoa. It will look and smell like chocolate. Purchase a box of valentine candies and remove/eat the candies. Children can roll up the dough and put them in the paper containers.



## **Spring**

Dye play dough pastel colors and add plastic eggs, artificial flowers, flower pots, etc.

Make bird nests out of lunch sacks and let children roll eggs out of play dough.



#### Summer

What a perfect time to give children shells, plastic fish, sand shovels, and little buckets.

\*Add texture to the dough by kneading in sand.



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## Abracadabra Magic Mixtures!

Here are more magic mixtures you can stir up for your children. They're great for molding, squishing, manipulating, and exploring.

**HINT!** Make sure children wash their hands before and after playing with these materials. You'll also want to supervise children when they play with "magic mixtures."

#### Flubber

2 cups white glue 1½ cups water food coloring 2 level tsp. Borax soap 1 cup hot water

Combine the glue, 1 ½ cups water, and food coloring. Set aside. In another large bowl, dissolve the Borax in the cup of hot water. Slowly stir the glue mixture into the Borax. It will coagulate and be difficult to mix. Pour off the excess water, then let it sit for several minutes. Drain off the remaining water. Store flubber covered in the refrigerator when it is not being used. Note! Borax is toxic and should not be used with younger children.

## Goop

1 cup cornstarch ½ - ¾ cup water

Place 1 cup cornstarch in a bowl. Slowly stir in enough water ( $\frac{1}{2}$  cup to  $\frac{3}{4}$  cup) to make a thick liquid. Hold the goop in your hand, then turn your hand over and let it run back into the bowl. How is it like a liquid? How is it like a solid?

## Silly Putty

white glue liquid starch

Use two parts glue to one part liquid starch. Pour starch into the glue a little at a time. Mix well. Add more starch if needed so mixture is not sticky. Cover and refrigerate overnight.

\* Add food coloring if you desire.

#### Color Stew

1/3 cup sugar4 cups water1 cup cornstarchfood coloringheavy duty zip bags

Cook all ingredients until thick. Divide mixture into three bowls and add red, yellow, or blue food coloring to each bowl. Place some of each color in a zip bag and seal with tape. Let children squeeze the bags and mix colors.

## Ornament Dough

(This will harden.)

1 cup flour 1 cup salt ½ cup water Mix the ingredients to make dough. Let the children mold the dough or flatten so it is  $\frac{1}{2}$ " thick and cut with cookie cutters.

Let the dough dry for a day. Turn the dough over and dry another day. Paint with tempera paint and spray with shellac.

\*Dissolve 2 TB. instant coffee in  $\frac{1}{2}$  cup hot water and add to the flour and salt. Your ornaments will look like gingerbread cookies.

*Hint!* Shorten drying time by baking in a 250 oven for 5-10 minutes.

## Non-Cook Dough

3 cups flour
1 cup salt
1/4 cup Joy dish detergent
1 1/4 cup water (approximately)
food coloring

Mix all ingredients together. Store in a zip bag or covered container.

#### Mud Pies

dirt flour water

Mix 4 parts dirt with 1 part flour. Add enough water so it will mold. Dry in the sun.

\*Decorate with sticks, leaves, seeds, and other natural objects.

## Sand Castle Dough

4 cups sand

2 cups water

2 cups cornstarch

large, old pan (This mixture might scratch your pan, so use an old one!)

Combine the sand, water, and cornstarch in the pan. Heat on low, stirring constantly until the mixture thickens. Set aside and cool. Mold into castles, animals, and other shapes. Allow to air dry or bake at 300 for 10 minutes.

\*You can tint the mixture with liquid tempera. You can also decorate with small shells or other natural objects to make gifts.

#### Street Chalk

small paper cups plaster of Paris craft sticks dry tempera paint water

Put  $\frac{1}{2}$  cup of plaster of Paris in a cup. Add a heaping teaspoon of dry tempera and stir with a stick. Add a little water at a time as you stir until it is like thick gravy. (Add a little more plaster of Paris if it's too runny.)

Let it harden for several hours, then peel away the cup. You're ready to be sidewalk artists!

#### Giant Bubbles

2 cups Joy dish detergent 1/4 cup glycerine 10 cups water

Mix the ingredients in a large pan. Allow the mixture to sit at room temperature for one hour. Blow bubbles with fly swatters, plastic rings from drink cans, or berry baskets.

\*Make a giant bubble wand out of a straw cut in half. Thread an 18"piece of string through the straws and knot ends. Holding a straw in each hand, dip in the bubble solution, then slowly pull the straws through the air.

#### Karo Bubbles

2 cups Joy detergent 6 cups water

3/4 cup white Karo corn syrup

Combine the ingredients and let stand at room temperature. Make individual bubble wands for the children by twisting the end of a pipe cleaner into a circle.





Here's a terrific magic wand you can make with your students. Take wooden chopsticks or coffee stirrers and dip one end in glue. Roll in glitter, dry, and ABRACADABRA!

You'll be all set for MAGIC MIXTURES!

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