

Squishing, rolling, sculpting, moulding . . . young children love to play with playdough. Add some props and playdough play becomes a powerful way to support children's learning. This simple preschool staple lets

children use their imaginations and strengthen the small muscles in their fingers—the same muscles they will one day use to hold a pencil and write. Using playdough with you or friend supports children's social skills such as sharing, taking turns, and enjoying being with other people. Playdough also encourages children's language and literacy, science, and math skills—all at the same time! Homemade or out of a can, playdough can provide hours of fun and learning.

What children learn

Playdough play supports development and learning in many areas. When children use playdough, they explore ideas and try different approaches until they find one that works. They compare and contrast objects ("Mine's a fat pancake and yours is skinny"), actions ("No, don't cut it! Scrape it, like this"), and experiences ("We're not making a snake—we're making a road"). In their experimenting, children come up with their own ideas, satisfy their curiosity, and analyse and solve problems. These are all skills that help children learn and succeed in school.

Resources

Birthday candles

Blocks Bottle caps Cookie cutters Combs Garlic press Large buttons and other objects that can be pressed into the playdough to make a design **Feathers** Leaves, twigs, pebbles **Lollipop Sticks** Plastic knives, forks, and spoons Rolling pin or bottle Scissors Small toy people and animals **Straws** String or shoelaces Variety of containers Tea strainer

1. Social and Emotional development

Creating with playdough lets children feel competent ("I'm good at rolling the dough") and proud of their accomplishments ("Hey, I made a dog"). Pounding, flattening, and squeezing are healthy and safe outlets for extra energy. They can also help children cope with strong feelings.





During playdough children talk about what they're making and how. Make comments about their work ("You cut it again"). Ask questions so children can describe and think about what they are doing ("What does this do?"). Connect their play to the real world ("Can you make a red tomato? A green one might not be ripe"). Teach cooperation ("I can help you make your car"), and observe and compare actions ("I'm rolling my dough too"). Interactions like these contribute to development and learning, helping to prepare children for success in school and in life.





2. Creativity and imagination

With playdough, young children express their ideas through art and makebelieve play. At the same time, they learn *symbolic thinking* by pretending that the playdough is something else ("That thing with the antlers is a moose").





Useful Vocabulary

Push

Pull

Drop

Squeeze

Press

Elastic

Bend

Twist

Roll

Stretch

Squash

Pinch

Flatten

Poke

Scrape

Smooth

Smear

Break apart

Longer than

Shorter than

The same length as

Lumpy

Grainy

Shiny

Older pre-school children often make detailed playdough creations. With one or more friends, they may imagine themselves to be construction workers building a highway, prehistoric hunters pursuing a woolly mammoth, or pastry chefs baking and selling cookies, cupcakes, and donuts at a bakery.





3. Language and literacy

When playing with playdough, children practice listening to and talking with friends and adults. Materials like playdough help children build their vocabulary as they explain what they are doing. For example, when a child exclaims, "Chop!" as she brings down the plastic knife, she uses just the right word to describe her action. Children use language to invent stories about their playdough creations. You may notice children using facts or ideas from books you've read together. Children also refer to things they did or saw in their everyday lives ("This is a burrito like we had at lunch").



When making homemade playdough, children learn about print and why people write. Following the recipe helps them connect written and spoken words and learn that writing can be used for different purposes. In this case, the writing explains how to make playdough. Encourage him to roll snakes and use them to form letters. Discuss action words like *pound* and *slice* and descriptive words like *mushy* and *sticky*. These types of experiences help children learn new words and communicate their thoughts and ideas effectively—skills they will need when they learn to read and write in the primary school.



4. Science



Young children learn about science through hands-on experiences. They learn by observing, thinking, and talking about how materials feel and how they change. You can encourage scientific thinking. Provide sawdust, sand or other small items to add to the playdough and then talk about how this new kind of dough looks and feels. Introduce words like *texture*, *grainy*, *smooth*, and *lumpy*.

Children might declare, "I'm making this flat!" as she pushes down on playdough with the palm of her hand. Or she may say, "I'm making it soft," as she adds water to dry playdough to make it more pliable. When you ask, "What do you think would happen if we added too much water?" you are helping her understand the scientific concept of *cause and effect*.



5. Math

Measure and count while you make a batch of playdough with the children. Children can learn about measurement and numbers by filling the cup and comparing the size of teaspoons and tablespoons, and about counting as they add the ingredients.

Children note changes in shape and size as they comment on, compare, and contrast the objects they make ("I made a triangle" and "Mine is a tiny ball and yours is big"). Others notice who has more or less playdough. Ask children to count how many pieces they are making or to arrange their creations by size or colour. Encourage mathematical thinking by asking, "What shape is that?" "Which snake is longer?" or "How many pieces do you have now?"





These play experiences encourage children to practice counting, learn about shapes (geometry) and how they relate to each other (spatial sense), and practice sorting and classifying. Such mathematical ways of thinking prepare children for learning more complex math concepts in the coming years.

6. Physical development

While poking, rolling, and squishing playdough, children develop the small muscles in their fingers and hands. They use hands, fingers, and tools to pound, push, poke, shape, flatten, roll, cut, and scrape. Through these manipulations, children develop eye-hand coordination, the ability to match hand movement with eye movement. They also gain strength and improve dexterity in their hands and fingers, critical areas of physical development for writing, drawing, and other purposes.



References

http://families.naeyc.org/learning-and-development/music-math-more/playdough-power