



Invite your child to explore the different properties and textures of sand by making their own Moon Sand. Sand is a unique material because each grain of sand is different! When viewed under a microscope every grain of sand is unique. Sand has been created through millions of years of naturally breaking down large rocks and boulders into tiny grains of sand. Sand isn't usually hydrophobic, in fact, when water meets sand, the dry sand will be wet and moldable. This is the reason why sand castles can be built. Hydrophobic means that a material will not get wet, rather it will repel water. You can feel the grains of sand in your hand when dry and when it is wet it can feel like it is getting harder when squished together.

Moon sand is a mixture of sand, cornstarch and water that will behave differently from dry sand. The cornstarch gives it a smooth texture and makes it easy to mold into different shapes. As your child mixes simple ingredients to create Moon Sand, they will feel and observe the difference in textures between grainy and gritty sand and the smooth softness of moon sand.

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*These activities are made possible thanks to funding from the Jesse and Joan Kupferberg Foundation and The FAR Fund.*



## Materials:

- play sand
- cornstarch
- bowl or container
- ½ measuring cup
- ¼ measuring cup
- 1 tablespoon
- water
- powdered food coloring (optional)
- spoon (optional)



## To make your own Moon Sand:

1. Fill in a ½ cup of sand into a bowl or container.
2. Add a ¼ cup of cornstarch into the bowl and mix.
3. Slowly in increments add 4 tablespoons of water while stirring/mixing.
4. Add a pinch of powdered food coloring into the container.
5. Mix all the ingredients together with a spoon or hands.

*(Tip: If moon sand feels too dry add more water; if too wet add more cornstarch.)*

Encourage your child to use cookie cutters or other sand toys to play with their moon sand. They can even make their own molding tool to play with or simply squeeze, mold and play with moon sand with their hands.

*(Tip: To make your own molding tool, take some aluminum foil and move, fold or squish it to the desired shape.)*

## Ask your child:

- How does the moon sand feel?
- Does the moon sand feel and look the same as the sand from the beach? If not, what feels or looks different?
- Can you mold the moon sand into a shape using your hands? What shape did you try?