



Mud Day - Any Day!

Not all mud is the same – some has lots of organic material in it, some is full of clay and is very sticky, some is gritty because it is mostly sand. Here's some ideas for further mud exploration and experimentation.

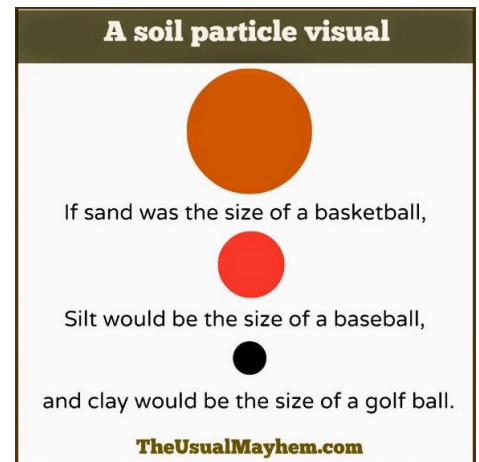
Soil Shake Up –

- Here's a [video](#) showing the experiment
- [Another version of the experiment](#)
- [More explanation of the different layers of soil](#)



What's in Your Soil?

- Super simple – good for pre-k and up - [Instructions for a simple soil exploration](#)
- More complicated – testing for the different sized soil particles
 - [Worksheet and explanation of different soil components](#)
 - [How to judge what's in your soil by feel](#)
 - [Explanation of Different Particles in Soil](#) – what they do, how you can tell them apart



Mud Art ideas

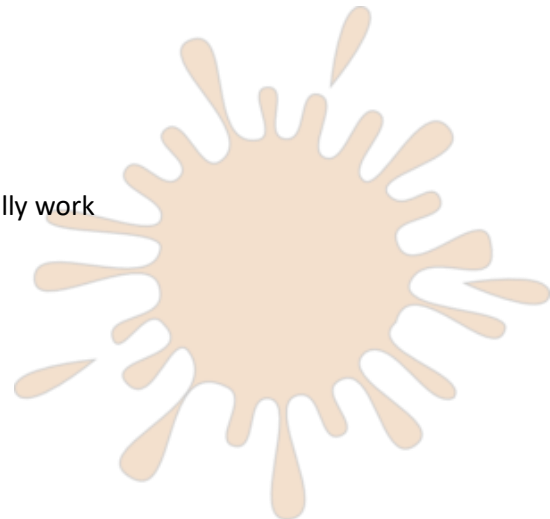
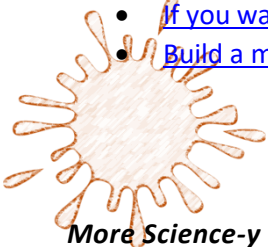
- [Mud Process Art](#) – great for “littles” on up, you can use kitchen gadgets or plastic animal toys to do prints with the mud
- [Making Mud cloth](#) – simple, kid-friendly idea

Mud Play

- [Making Mud Bricks](#) – you will need a lot of clay in your soil for this to really work
- [The Benefits of Mud Play](#) and an example of a Mud Kitchen
- [If you want prettier mud](#) – you could use this to build a faerie house
- [Build a mud kitchen](#)

More Science-y Experiments with rocks and Soil

- [Using different size of rocks to filter water](#)



What's living in your mud?

- [Be a worm Detective](#)
- [Go on a Mini Beast Safari](#)

And the best...

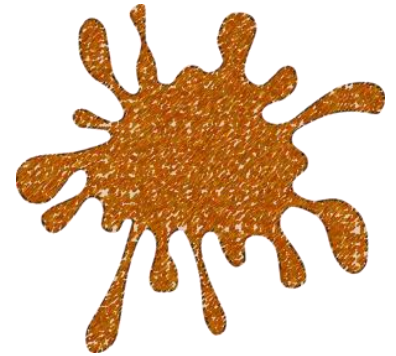
Layered [Dirt Snacks](#)

[Worms in Dirt snack](#)

Grown ups' Corner - Other resources:

[More on the benefits of playing in the mud](#)

[More tips for mud play](#)



Soil Shake Up

You can do a simple shake test to find out how much clay, silt, and sand is in your soil. All you need is **a jar with a lid**, a handful of **soil**, and **water**.

Soil shake-up activity!

Dig down about six inches and grab a handful of soil.

Put the soil into a jar. Fill it to the top with water and close the lid tightly. Shake the jar for a few minutes.

Set the jar down. Look for large particles of sand, which should settle at the bottom of the jar. Mark the top of this layer with a pen or tape.

Wait an hour. Look for a layer of smaller silt particles, which should settle above the sand. Mark the top of this layer.

Wait a day and look at the jar again. The water should be clear. Look for a layer of the smallest clay particles to settle on top of the silt. Mark the top of this layer.

The size of the layers tells you how much sand, silt, or clay is in your soil.



Types of Soil

Soil differs greatly from place to place, but all soil is made up of different amounts of three types of particles: sand, silt and clay.

What are the types of soil particles?

Sand is the largest particle found in soil. When you rub it, it feels rough and gritty. Sand does not have many nutrients, but it dries quickly after rainfall, and it is good for *drainage*, which means it lets water flow through it easily.

Silt is the medium-sized particle found in soil. Silt feels smooth and powdery when dry, and it feels slippery when wet. Silt can be packed down into a crust that makes it harder for water and air to pass through it.

Clay is the smallest particle found in soil. Clay feels smooth and hard as stone when dry, and it feels sticky when wet. While clay can hold many nutrients, it does not allow much air or water to pass through. Too much clay can make the soil heavy and not good for growing plants.

Loam is a mix of sand, silt and clay. It is the best type of soil for growing plants. Loam breaks up easily and holds moisture and nutrients, while still allowing some water and air to pass through.

