

CHAPTER- 26

Mud and Stone

Like water and air, mud is also an integral part of our lives. We can not think of life without it. We pay no heed to it but keep using it.

List how mud can be useful to us?

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### Different types of mud?

Collect different samples of mud, e.g. mud from the fields, rivers/ponds, roadside, open grounds etc. for this you'll have to go with your friends.

Collect these samples in a transparent polythene and label them.

### Experiment 1 - How is the mud?

What can you test in the mud?

**How does the mud look like? Coarse or smooth?**

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What is its colour?

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**How do you feel on touching or pressing it?**

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How does it smell?

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**Did you find any plant or animals in the mud?**

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Test the samples collected and fill up the information in your copy in a tabular form.

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**Were any living organisms present in it? If yes. How does it look?**

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How can decayed plants/trees and creatures useful for the mud/soil. Find from your elders.

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Find out from a farmer, the kind of soil considered fertile for the crops?

For a bumper harvest, the farmers add organic manure to the soil. Find out how the farmers prepare organic manure?

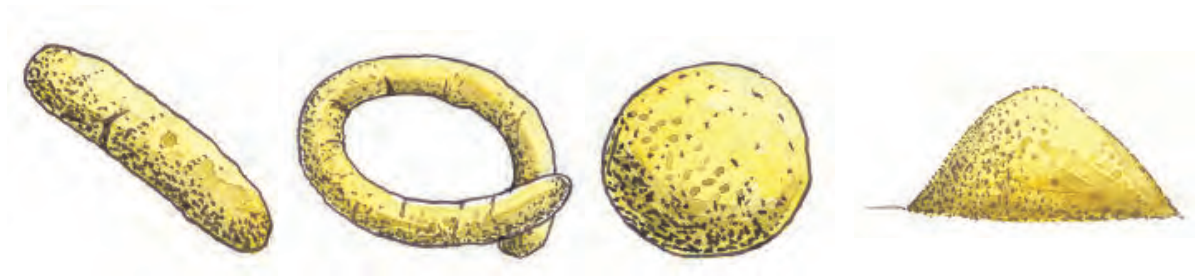
## Experiment 2 - Make clay toys

You must have made earthen toys.

What kind of mud is best for making toys? Is it from the fields or from the roadside?

Take a handful of mud. Remove, pebbles, stones, grass etc. Now add water, drop by drop and knead as we knead a dough of flour. Add water that is enough to make a ball and it should not stick to the hands. On a flat surface, try to make a rolling pin with this mud ball. Now turn it as shown in the picture. If the rolling pin can be bent easily, then a ring like structure can be made of it.





If a full ring is formed, then it is soft clay.

If the ring breaks but a rolling pin can be made then it is mixed soil .

If you fail to make a rolling pin but can make a ball then it is 'sand soil' .

If a ball can not be formed then it is sand.



**Now tell what kind of mud does the potter use to make toys and vessels.**

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Experiment 3

Now get clay to make different varieties of toys and exhibit them in your class.

Have you ever seen a well or a pond being dug? If not then don't miss any opportunity that comes your way. Given is a picture of the different layers of soil that can be seen at the time of digging a well.

Are the different layers of soil of the same colour?

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**Name the colours you can see in the different layers of soil?**

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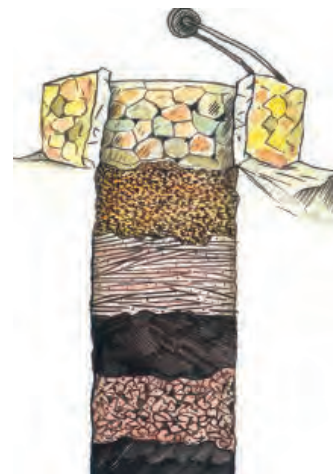
On digging a well, we get mud at the deepest end. It is followed above by red soil and then by pebbles and rocks.

Soft stone, Hard stone

Collect samples of different stones.

Throw the stones from a height and see which ones break?

Mud and sand are formed by the breaking of stones into small particles. Some stones can be easily broken, whereas, these are some which are difficult to break even with a hammer or a chisel.



The different layers of soil

Conduct this experiment with two different stones.

Fill a bucket or tumbler with water. Rub the two stones in water for five minutes exerting pressure. Let the water in the container stand still for some time. Now carefully remove the water.

What do you get to see at the bottom of the container?

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**You can repeat this experiment with other stones. Did you get more or less particles on rubbing these stones?**

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**What can you say on the basis of this experiment?**

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## What have we Learnt?

### Oral Question

1. Name the different kinds of soil?
2. What is added to the soil for a bumper harvest?

### Written Question

1. What are the uses of mud/soil?
2. How is soil/mud made?
3. How will you know that the mud is soft or mixed or sandy?

## Find Around You

1. Collect different samples of mud/soil and write their names.
2. How do a potter make vessels and toys? Find out about it & write.

