



Learning at the Lock

Name _____

Date _____



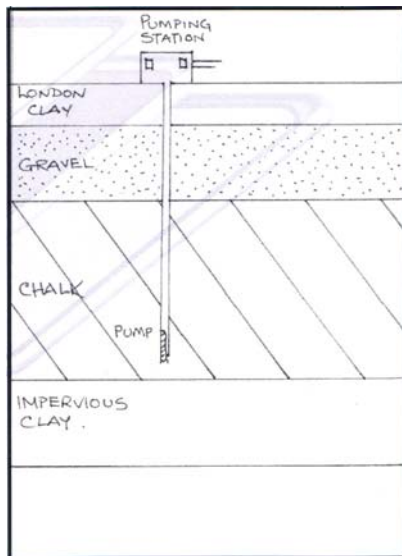
THREE VALLEYS WATER

BOREHOLE

Water distributors had to solve the problem of taking the water from the aquifer, deep below the ground.

They would have thought of all sorts of ways and maybe some of your ideas were talked about.

You can look at the diagram and learn a little about how Three Valleys Water gets the water from under the ground.



Boreholes are drilled down into the chalk rock.

These holes can be up to 80 meters deep.

The water is then pumped to a water treatment plant where it is cleaned and then stored in a reservoir and finally pumped to people's home.

WHAT CHALK IS MADE OF AND WHY OUR WATER IS CALLED "HARD".

Millions of years ago, chalk rock was created from the remains of tiny shells being compressed into a layer at the bottom of the sea. Changes in the earth brought the chalk layer closer to the surface. This means that the Three Valleys Water area was once covered by a tropical sea; *imagine that!!*

Dissolved minerals from the chalk, mainly calcium and magnesium, are present in our water. This is why our water and most of the water across the South East of England is 'hard'. Drinking this water is very good for us but it effects machines that heat up water.

A LITTLE DETECTIVE WORK FOR YOU TO CARRY OUT
Find out why calcium is good for you?



What does calcium do to machines that use water? *Look inside an old kettle and it will give you a clue.*
