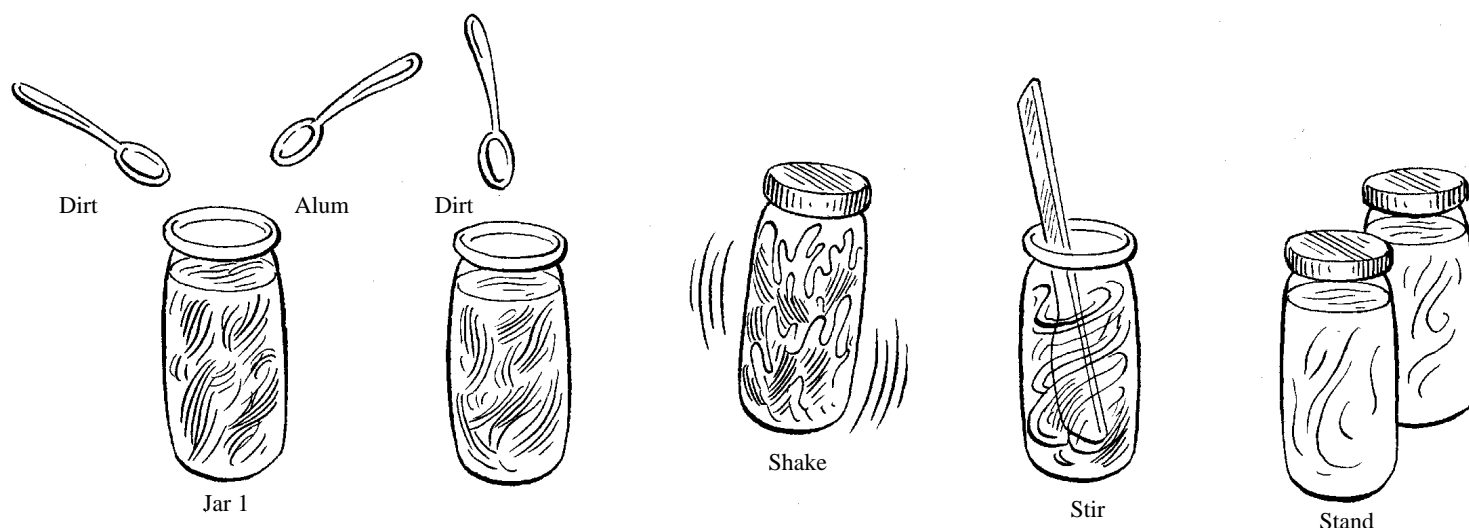


CAPTURING THE RAIN ACTIVITY SIX

Water running into storage dams is not always clean. After heavy rain it may contain twigs, leaves and dirt which must be removed before the water is sent along pipes to our houses. Water from dams is cleaned up at filter stations (there are 6 of these in the Auckland region). The first step for cleaning water is to add a chemical called alum. Dirt sticks to alum leaving much cleaner water at the top of the special settling tank. (See the picture on Capturing The Rain Activity Sheet 3)

In this activity, you will see what happens to dirty water when alum is added to it. You will need 2 tall preserving jars (or similar) with watertight lids, a teaspoon of alum (from the chemist or science store), a long spoon or spatula, and some dirt from the garden.



1. Put the same amount of water into each jar, leaving about 20 millimetres of space at the top. Add the same amount of dirt to each jar. There should be just enough dirt to make the water a dirty brown colour.
2. Add a teaspoon of alum to one of the jars, and tightly screw the lids onto both jars.
3. Shake both jars for 25 seconds.
4. Put the jars on a sink bench, remove the lids and use the spoon or spatula to stir each jar slowly for 5 minutes.
5. Observe what happens during the next 15 minutes. Make notes and simple sketches. Look carefully for any differences between the two jars.
6. Next day, observe the jars again, and note any differences. Prepare a report about this activity which can be used to explain how alum is used to clean up our City water supply.

It is not safe to drink the water from this activity!