

Experiments with Water

CBSE, EVS Class - V, Unit - 7

Enquiry on water

Curricular objectives: To arouse curiosity about natural environment, develop skills like experimenting, observation, recording, interpreting and recording

Themes to be covered: Forms of water, sinking and floating, Substances that mix with / dissolve in water, measuring volume of water

Classroom experience

Sink or Float:

Students are asked to predict whether different objects will float or sink in a bucket of water e.g. stone, needle, iron nail, pebble, bottle cap, pen cap, pencil, eraser, match stick, paper, leaf, candle, tennis ball, plastic lid, bolt, aluminum foil. They can also predict which objects will float in water, which will sink quickly or slowly and which will float somewhere between. It would be useful to design a worksheet that will enable you to record predictions and subsequent observations of the objects in water with comments.

The teacher can help them understand concepts of density, weight and volume to explain these phenomena.

Dead Sea experiment:

A doll is dropped into a bucket of water, it sinks. Students are asked to dissolve salt in water and observe what happens. The experiment can be repeated with potato, lemon and also add enough salt to make the objects remain in float

**M. Ramakrishnan
E. Maheswari**

in between (semi-submerged). As the density of water is increased by dissolving salt, the object



(lemon as in below picture) comparatively becomes less dense and hence floats.

Make layer of float:

Teacher takes a test tube, water, oil, food coloring and washing liquid. Students pour water and oil in to the test tube, followed by the food coloring and washing gel. Through this experiment, we



can explain that not all liquids mix with each other and also relate this to the concept of density.

Soluble and insoluble:

Students can try to dissolve different substances in water - salt, sugar, sand, chalk powder, oil, rasna powder, milk, food colour additive,

turmeric powder, etc. This can be used to explain the concept of solubility and insolubility.

Milk Test:

Take a rectangular glass piece, approximately 10 cm X 6 cm. In order to test the purity of the milk, place the rectangular glass piece in a sliding position and put two drops of milk that is to be

tested. The drops will slide down fast if it mixed with water. We can note down the timing of the each sample of milk, so that we can compare dilution of different milk and also can be compared with water drops. This can be used to explain the concept of viscosity and how it varies from density.



M. Ramakrishnan, PST, GPS Sulthanpet



E. Maheswari, PST, GPS Ariyur