

SAINIK SCHOOL GOPALGANJ

CLASS –VIII

SUB: SCIENCE (PROJECT)

General Instruction: All these Projects should be done at home and observation of Projects will be written in home work copy or A4 size paper.

1. Make a 50 cm × 50 cm bed of dry sand about 10 cm in thickness. Make sure that its top surface is leveled. Take a wooden or a plastic stool. Cut two strips of graph paper each with a width of 1 cm. Paste them vertically on any leg of the stool - one at the bottom and the other from the top. Now gently put the stool on the sand bed with its legs resting on the sand. Increase the size of sand bed if required. Now put a load, say a school bag full of books, on the seat of the stool. Mark the level of sand on the graph strip. This would give you the depth, if any, to which the legs of stool sink in sand. Next, turn the stool upside down so that now it rests on its seat on the sand bed. Note the depth to which the stool sinks now. Next, put the same load on the stool and note the depth to which it sinks in the sand. Compare the pressure exerted by the stool in the two situations.
2. Take a tumbler and fill it with water. Cover the mouth of the tumbler with a thick card similar to that of a postcard. Hold the tumbler with one hand while keeping the card pressed to its mouth with your other hand. Turn the tumbler upside down while keeping the card pressed to its mouth. Make sure that the tumbler is held vertical. Gently remove the hand pressing the card. What do you observe? Does the card get detached allowing the water to spill? With a little practice you will find that the card continues to hold water in the tumbler even after it is not supported by your hand. Also try this activity by using a piece of cloth to hold the tumbler in an upside down position (Fig.1).

Fig. 1



3. Take 4-5 plastic bottles of different shapes and sizes. Join them together with small pieces of glass or rubber tube as shown in Fig. 2. Keep this arrangement on a level surface. Now pour water in any one of the bottles. Note whether the bottle in which water is poured gets filled first or all the bottles get filled up simultaneously. Note the level of water in all the bottles from time to time. Try to explain your observations.

Fig. 2

