Date	Class Level First Class and Second Class	Subject Science
Strand Materials	**Strand Unit** Materials and Change	
Title Beach Towels: What Material Works Best?		
Objective(s) Identify and investigate materials that absorb water.		
Skills Required Working scientifically: questioning, observing, predicting, experimenting and investigating, estimating and measuring, analyzing.		

Learning Objectives	Learning Activities
The child will be enabled to: Understand the reasons why we need materials which absorb water. Test materials to see which has the best absorption levels. Decide on the best material for a towel.	**Teacher Directed Approach:** Begin the lesson with an anecdote about how you woke up this morning and your washing machine had leaked all over your kitchen floor. What should you have done? The children will answer by saying that you should mop up the water. Ask the children to help you test a variety of materials to see which, is the best at absorbing water and thus which, would make the best towel. Ask the students to consider the idea of a fair test. Will the containers used need to be the same size? Will there need to be the same amount of water in them all? Will our pieces of material need to be the same size? How will they figure out which material has absorbed the most water? Should they set a time limit for how long the material in the water? Should all pieces of material be left in the water for the same period of time? Should all pieces of material be placed fully into the water? **Investigative approach:** Divide the children into pairs and give each pair 3 beakers or glasses that are

	the same size. It works best if these are tall and narrow. Give the pairs lengths of masking tape. They stick the tape length ways to the glasses. Add water to each glass, so that the same quantity of water is in each glass. Add food colouring so the water can be easily seen, again making sure to add the same amounts to each glass. The children mark the level of the water on the masking tape. **Talk and Discussion:** Distribute squares of materials, all the same size, such as paper towel, napkin, sock, piece of foam and clingfilm. In their groups, the pupils predict how these will rank in terms of absorbency. **Investigative approach:** The pairs put a folded piece of each material into each beaker, count for a set period of time, such as ten seconds, and remove it. They mark the new level on the masking tape. The beaker with the lowest level of water will be from the material which absorbs water best.
	Resources Beakers or glasses: narrow and tall: same size for a fair test. Water Food colouring Squares of materials such as paper towel, napkin, sock, foam and clingfilm: same sizes for a fair test. Masking tape Markers

Differentiation Higher and Lower order questioning. Differentiate group activities and roles to account of individual needs, by support, task. Mixed ability pairing.
Assessment Teacher observation and questioning.
Linkage and Integration Mathematics: Capacity will be integrated as the children consider the amount of water in each beaker.