

# SuDS Session Plan – Testing materials



**Before session:** Children need to bring in small yoghurt pots. Use Stanley knife to create an X of slits in the bottom of each one.

Session Objectives	Session summary	
To plan and carry out a scientific enquiry to answer the question:  Which surface materials are rainwater friendly (absorb water)?	Introduction	15 min
	Plan	15 min
	Test	15 min
	Conclusion	15 min

Full session outline		
Activity	Resources	Time
<p><b><u>Introduction</u></b></p> <p>Give children a selection of resources such as: sand, gravel, clay beads, compost, soil, moss, lego, wooden beads Can they match each resource to the images in the word bank (see below) These are all surface materials. What do you think I mean by that? (that they can be used to cover surfaces like the ground or roofs) What might each of these surface materials be used for? Where might you come across them?</p> <p>Lego – Perspex awning, wooden beads – decking, clay – roof tiles or bricks, gravel – roads, soil, moss, compost – gardens, parks and natural landscapes (woodlands, meadows)</p> <p>The purpose of SuDS is to reduce flood risk by stopping rain from rushing to the drains. We need to make outdoor spaces more rainwater friendly – encouraging rain to stay instead of draining away</p> <p>Which materials do you think would help with this? Get children to sort the materials. Allow them to make mistakes.</p>	<p>Materials: such as: sand, gravel, clay beads, compost, soil, moss, lego, wooden beads</p> <p>Wordbank</p>	15 min
<p><b><u>Plan</u></b></p> <p>Children to get into partners. Each child has a pot similar size to its partner. They can each choose to fill the pots with whatever they want from the resources provided. They can choose 1-3 materials for their pot but the two pots need to be different (a material must not be used by both partners). Give children the worksheet. Explain page one. Children to complete: 1. Question and 2. Plan</p>	<p>Plastic pot each (yoghurt pot) Plastic spoons to fill the pots Worksheet</p>	15 min

<p><b>Test</b>          Explain the principles of a fair test. How can they make sure the test is fair? - pots filled to the same level, same amount of water poured into each one, try to pour water at the same rate. Discuss how to read the measuring cylinders.          Children to complete 3. Test and 4. Conclusion</p>	Measuring cylinders Jugs	15min
<p><b>Conclusion</b>          Children to present their results. Teacher to record materials that were in the more absorbent pots for each pair.</p> <p>Discuss as a group:          If you were a SuDS designer, what materials might you use? What could be done to make your playground more RAINWATER FRIENDLY (encouraging rainwater to stay)? What about in homes and gardens? In the street?</p>		15 min

**Adding challenge to the activity:** Add ½ tablespoon of cocoa powder to a small bottle of water (to represent pollution) and shake it. Measure out 100ml and pour on a pot with hard surface materials in it. Measure out 100ml and pour it on a pot with absorbent surface materials. Observe the rate at which the water seeps out and observe the colour of the water that comes out. The absorbent materials should result in a slower rate of flow and it should filter the water resulting in cleaner water. What does this tell us about the benefits of SuDS?



Sand and gravel

Compost and moss

# Surface Materials – Word bank

Plastic



Wood



Clay



Gravel



Soil



Plants (moss)



Compost



Sand

