

CAPTURING RAIN

Activity 4

How does a water catchment work?



An area which catches, collects and stores water on is known as a catchment. To make your own catchment you will need a large sheet of plastic (or waterproof tarpaulin), a hose with a fine spray nozzle, a watch and a bucket.

1. Arrange the plastic sheet so it looks like a model of the land, with hills, valleys and sloping areas. Use various objects underneath the plastic to hold the shape, e.g. rocks, sticks, bits of wood and screwed up paper.
2. At the lowest point of your model, create a 'dam' which will be able to hold water. The sides should be at least 100 millimetres high.
3. Turn on the tap then hold the hose nozzle up high so water showers down onto all parts of the model just like a rain shower. Observe what happens.
4. Continue until either the dam is full or one minute has passed, then turn off the hose.
5. Now see if your group can get the water from your dam into the bucket, then onto some plant which needs watering!
6. Use the equipment for a new experiment which can test your own hypothesis about water catchments. (Think about the shape of the catchment, size of the dam, how long it rains for, and how heavy the rain is.)
7. Write a report to explain your findings from this experiment.