

Down the Slopes

Focus

When rain falls, the water flows that result can take two paths. Some of this water, called surface run-off, flows directly into gullies and streams. The rest soaks into the soil. Use this activity to demonstrate water runoff and infiltration in catchment areas.

Materials

- Tin cans with both ends removed
- Water
- Stopwatch

Procedure

- Choose several surfaces around the school grounds—
 - grass,
 - sand,
 - packed earth,
 - soil,
 - bitumen.
- Press a can into each of the surfaces (not possible on bitumen).
- Pour equal quantities of water into each of the cans.
- Observe what happens to the water. Time and record how long it takes for the water to be absorbed.

Results

Surface	Time water takes to absorb	Comments
Grass		
Sand		
Packed Earth		
Soil		
Bitumen		

Discussion

Apply your findings to runoff in catchment areas—

- Q Which surfaces are more conducive to the formation of streams and rivers and which surfaces are more conducive to underground water storage?
- Q What can the students now say about which land is best suited to being a catchment area?

EXTENSION

- Try the same experiment on sloping ground.