

Water in Soils - Teacher's Notes

Floods

When an area receives too much rain, it can be disastrous. The underlying geology of an area can contribute to how runoff from rainfall behaves, such as whether it will soak in quickly or stay on the surface. Areas with high rainfall and soil high in clay will tend to be prone to floods, much more than low rainfall areas or those with sandy, free-draining soils. Areas such as Broome in Western Australia can be prone to flooding, especially during cyclone season due to the high clay content of the soils.

Some further information and resources on floods and droughts can be found at the following websites:

https://www.csiro.au/en/Research/Environment/Extreme-Events https://www.mdba.gov.au/education/teachers/lesson-plans







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Teacher demonstration

Materials

- Two or more soil samples one with a high clay content. Alternatively, you could use a piece of modelling clay
- Clear containers, such as plastic cups
- Water

Method

- Place each soil sample into a different cup.
- Pour water into each cup and observe how long water takes to soak in.
- Once the initial pour has wet the soil, add more water and again observe how long it takes to soak in.







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