

Our Changing Catchment

Weathering, Erosion & Deposition Series

What is a catchment?

A catchment is an area of land where water from rain is collected. A catchment is an area that has high places (hills), low places (valleys), and waterways. When it rains the water flows downhill with the slope of the land. The water collects in the lowest part.

Directions: Label these locations on the catchment: hill, valley, river, and collection.



Make a model of a catchment

You can make a model of a catchment to learn what can happen to soil and water. You will need: a large tray, soil or sand, small rocks, a large cup, a towel, a book, and water. To make your model arrange the materials like the photos. Wash your hands after handling the soil. Then...



1. Carefully pour water at the top of the wavy pathway. Observe and think:

Where did the water go? What does the water look like? Did anything happen to the soil?

2. Pour water all over the catchment. Observe and think:

Where did the water go? What does the water look like? Where did the soil go?



Extension activity: Think of ways you can change your catchment so that most of the soil stays in place when you pour water all over the catchment. Test your ideas. Which idea worked best? Why?

What changes a catchment?

Natural processes like weathering, erosion, and deposition constantly change our catchment. They create many different landscapes and landforms over time.

Directions: Draw lines to match each natural process with its action.

Weathering	When sediments move from one place to another
Erosion	When sediments settle at the bottom of a waterway
Deposition	When rocks and minerals break into smaller parts called sediments

What is turbidity?

Sediments from weathering, erosion and deposition affect our water. Turbidity is the measurement of how cloudy water is. Water that is clear has low turbidity. Water that is cloudy and dirty has high turbidity. Water with high turbidity is less healthy.

Directions: Circle 'True' or 'False' for each statement about water turbidity.

1. Turbidity from sediments can change the taste and smell of water. True False
2. Aquatic plants grow easily in water that has high turbidity. True False
3. Sediments can carry or hide germs that can make us sick. True False
4. We want our water to have lots of sediments and high turbidity. True False

Did you know?



Photo: A. Qazi, WaterNSW

The Jenolan Caves in New South Wales were created mostly by the weathering of limestone rock by water. The Jenolan Caves have underground rivers, natural archways, stalactites (grow down from the ceiling), and stalagmites (grow upwards from the ground).

In Gundungurra Dreaming stories, the Jenolan Caves are the location where a giant eel, Gurangatch, rested and recovered after his fight with a big quoll, Mirragan. People believe that Gurangatch's peaceful thoughts have become a part of the land at the Jenolan Caves.

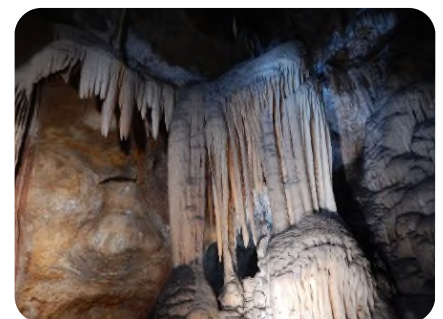


Photo: K. Newport, WaterNSW