



MANZI'S NEWS



A Newsletter for Manzi's Buddies

December 2018

Heights to Homes: Physical Features

Hi Friends,

Water is used everyday for activities such as taking a bath, brushing teeth, for the toilet, washing clothes or even drinking a glass of cold water. Did you know that the water that comes out of our taps travels over physical features like mountains, escarpments, high lying places and low lying places?



A mountain is a land that is much higher than the surrounding area, and a group of mountains that are part of the same formation are called a mountain range. The highest mountain in Africa is Tabana Ntlenyana in Lesotho, which is part of the South African escarpment at 3482m high, in the uKhahlamba (Drakensberg) mountain range. Valleys are found between the mountains and hills and are formed when river water flows, dragging rocks along the bottom whilst eroding the mountains to form valleys. The more water there is in a river, the more energy there is to make the valleys larger.



The Drakensberg Mountains

credit: places.co.za

The valleys that are found higher up a mountain will be smaller because the river will have less water. As the river flows towards the sea it will join other rivers and become larger, so the lower parts of the mountains will have more water and wider valleys.

The place where a river starts is called a source. A source is usually found high up in the mountains where precipitation in the form of rain or snow collects. Rivers end up flowing to the ocean. The area where rivers enter an ocean is called the mouth of a river or an estuary.

The water in some rivers is always flowing but some rivers dry up when the rainy season stops. If there is a lot of rain, the river will have a strong flow (current). Rivers that flow all the time are shown as blue lines on a map. Rivers that flow only when it rains, but stop when there is no rain, are shown as broken blue lines on a map.

A waterfall is when water from a river flows over a steep slope. The water will cascade down very rapidly when there is a steep drop in the river bottom.



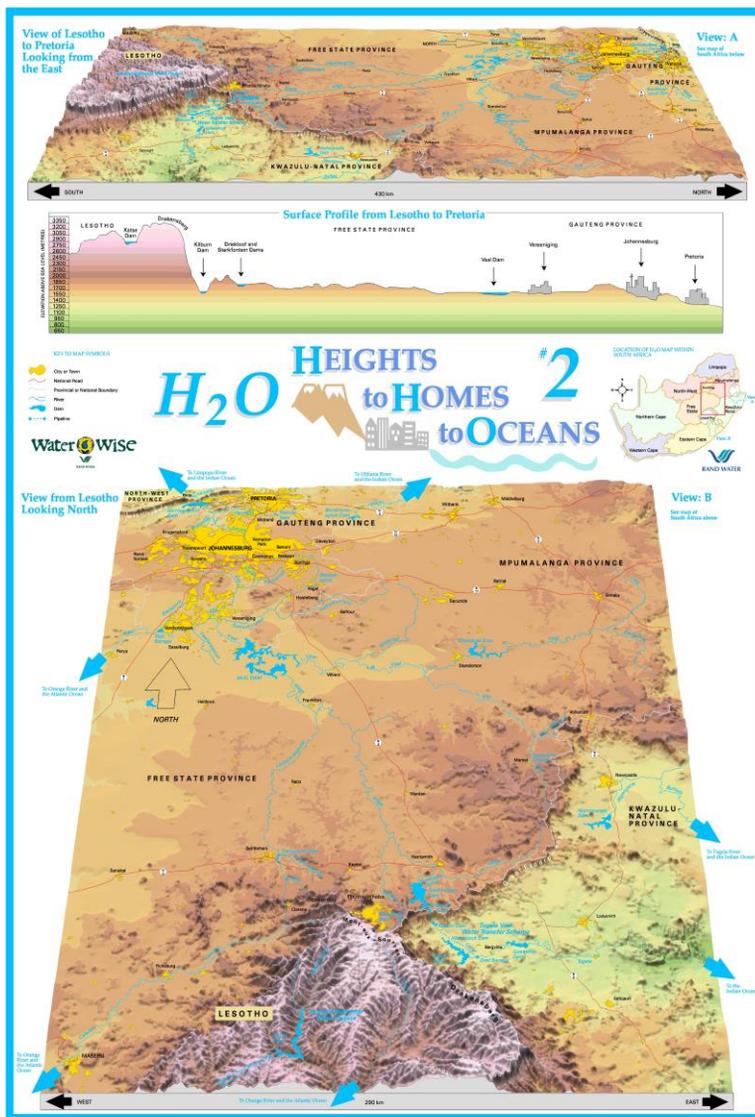
A Waterfall

credit: wikipedia.com

A river will flow downwards from its source via gravity to the river mouth at the sea. When many rivers join together to make a bigger river this is called a river system.

Friends, the water that we drink from the tap, comes from different river sources: the Thukela River at Mount-aux-sources in KwaZulu-Natal; the Vaal River; and from the mountains of Lesotho, when snow and rain precipitate. These sources are mostly part of the Drakensberg mountain range. The water will flow from these sources and form part of the Vaal river system with rivers such as the Waterval, Klip and Wilge that flow into the Vaal Dam. Rand Water will then draw water from the Vaal Dam in order to clean it and supply it to municipalities, who will then supply it to taps. This is the water that we will use to wash, cook and drink.

This water will then go down the drain and toilet as wastewater (sewage) to the wastewater treatment works where it will be cleaned and treated to a standard set by the Department of Water Affairs and Sanitation before being discharged into the closest river. Treated wastewater from the northern side of the Witwatersrand watershed flows into rivers that drain into the Crocodile and Limpopo Rivers and end up into the Indian Ocean. Treated wastewater from the southern side of the Witwatersrand watershed flows into the rivers that drain into the Vaal River, and then on to the Orange River and then to the Atlantic Ocean. In this way, water is returned to the natural water cycle.



Remember the third meaning to being Water Wise? Yes friends, it's Don't Pollute. When we throw our litter on the ground it gets washed into our rivers and dams when it rains. This litter is not good for the natural environment and it is very expensive to clean the water. Would you drink water that has litter in it? No, because pollution spreads disease that can make people sick. It is our responsibility to keep our environment clean by putting our litter in the bin, otherwise our litter will flow from heights to homes through our dirty rivers. Be responsible by recycling, reducing, reusing and repurposing. Make sure your litter does not end up going down a river or into a dam or the ocean. Then you are being Water Wise.

Lots of Love
Manzi

PHYSICAL FEATURES ACTIVITY

Let's see if you understand the various physical features by writing the correct answer to the pictures and clues in the space provided.

ANSWERS: ESTUARY, UKHAHLAMBA, VALLEY, -----, WATERFALL

(a) _____

credit: places.co.za



(b) The area between two mountains is called a

credit: howtodrawcartoonsonline.com

(c) How would you draw a river that dries up in winter on a map?

(d) _____



credit: wikipedia.com



(e) _____

credit: hinglink.com



References:
en.wikipedia.com
howtodrawcartoonsonline.com
places.co.za
thinglink.com

