

## Victoria Waterfall

20 Jan 10:30

Duty six : Blue

Start	Time	Activity	Requirements	Instructions	Scouter
We live in a beautiful world with natural wonders. Today, we are visiting Victoria Falls, one of the seven natural wonders of the world					
20 Jan 10:30	5	Activities : Opening	Register, beans, flag, totem and skin	Grand Howl Flag Break Register Inspection - belts and shoes	Akela
Does water only go down? Water falls happen because rivers go over the edge of cliffs/ledges or rocks and the water falls? Can you make water go up?					
20 Jan 10:35	10	Game : Water Balloon Yo Yo		Cut a rubberband in half. Then, attach the rubber band to the water balloon. The kids have to yo-yo them up and down until the last one with their balloon in tact wins!	Riki
Can water move from one glass to another without you having to do anything?					
20 Jan 10:45	10	Activities : Water Rainbow	6 wide mouth glasses or jars  Paper towels {use the kind where you can select a size}  Food dye or liquid water colors {red, yellow, and blue}	<p>It's a good idea to <b>test your paper towel strip</b> to make sure they fit properly in your glasses. They should be able to go from the bottom of one jar to the next without sticking up in the air too much. The paper towel on the left shows the just-right height.</p> <p>First, line up the glasses and fill the first one with a <b>good squirt of red watercolor</b>, the third with yellow, and the fifth glass with blue. Leave the other glasses empty.</p> <p>Next, <b>add water to the glasses</b> with color until the colored water almost reaches the top.</p> <p>Move the glasses into a circle and <b>add the paper towels</b>. Starting with the red, add one end of the paper towel and then put the other end in the empty glass next to it.</p> <p>Continue around until the last paper towel was placed into the red glass.</p> <p>After several minutes, the colored water will travel the whole length of each paper towel.</p> <p>After another five minutes, the water level will have dropped in the red, yellow, and blue glasses and rose in the once empty glasses as the water continued to travel from the more full glasses to the less full glasses.</p> <p><b>Not Working?</b></p> <p>If you <b>aren't seeing much movement</b> within a few minutes, it may be that you need to add more water to your colored water glasses. It really needs to be almost at the top for the water to walk quickly. So try topping off those glasses and seeing if that gets things moving.</p> <p>If you see the water moving up the paper towel but it seems like</p>	Akela

				<p><b>it's taking forever</b>, it may be the type of paper towel you are using. You want a paper towel that will really hold a lot of water.</p> <p>It really is worth the extra effort of trying different cups and paper towels to get this activity to work. And once you have had success, don't throw out those beautifully colored paper towels or the colored water!</p> <p><b>The Science Behind It</b></p> <p><b>Capillary Action</b></p> <p>The colored water travels up the paper towel by a process called <b>capillary action</b>. Capillary action is the ability of a liquid to flow upward, against gravity, in narrow spaces. This is the same thing that helps water climb from a plant's roots to the leaves in the tree tops.</p> <p>Paper towels, and all paper products, are made from fibers found in plants called <b>cellulose</b>. In this demonstration, the water flowed upwards through the tiny gaps between the cellulose fibers. The gaps in the towel acted like capillary tubes, pulling the water upwards.</p> <p>The water is able to defy gravity as it travels upward due to the attractive forces between the water and the cellulose fibres.</p> <p>The water molecules tend to cling to the cellulose fibers in the paper towel. This is called <b>adhesion</b>.</p> <p>The water molecules are also attracted to each other and stick close together, a process called <b>cohesion</b>. So as the water slowly moves up the tiny gaps in the paper towel fibers, the cohesive forces help to draw more water upwards.</p> <p>At some point, the adhesive forces between the water and cellulose and the cohesive forces between the water molecules will be overcome by the gravitational forces on the weight of the water in the paper towel. When this happens, the water will not travel up the paper towel anymore. That is why it helps to shorten the length that colored water has to travel by making sure your paper towel isn't too tall and making sure you fill your colored liquid to the top of the glass.</p>	
<b>More rain means bigger waterfalls, less rain means smaller waterfalls - how do we measure rainfall?</b>					
20 Jan 10:55	20	<b>Activities</b> : Make a Rain Gauge	<p>A plastic (soft drink) bottle</p> <p>Some stones or pebbles</p> <p>Tape</p> <p>Marker (felt pen)</p> <p>A ruler</p>	<p><b>Instructions:</b></p> <ol style="list-style-type: none"> <li>1. Cut the top off the bottle.</li> <li>2. Place some stones in the bottom of the bottle. Turn the top upside down and tape it to the bottle.</li> <li>3. Use a ruler and marker pen to make a scale on the bottle.</li> <li>4. Pour water into the bottle until it reaches the bottom strip on the scale. Congratulations, you have finished your rain gauge.</li> <li>5. Put your rain gauge outside where it can collect water</li> </ol>	Riki

				<p>when it starts raining. After a rain shower has finished, check to see how far up the scale the water has risen.</p> <p><b>What's happening?</b></p> <p>Rain falls into the top of the gauge and collects at the bottom, where it can be easily measured. Try comparing the amount of rain to the length of time the shower lasted, was it a short and heavy rain shower or a long and light one?</p> <p>If you want to get serious you can graph the rainfall over weeks or even months, this is especially interesting if the place you live experiences varying seasons where sometimes it is very dry and other times it is very wet.</p>	
<b>Humans need plenty of water so that we function well</b>					
20 Jan 11:15	5	<b>Activities</b> : Juice and biscuits		Juice and biscuit break	Mang
<b>Do you know anything about Victoria Waterfall?</b>					
20 Jan 11:20	10	<b>Yarn</b> : Victoria Waterfall		See attached	Akela
<b>I love the sound of a waterfall. How about you?</b>					
20 Jan 11:30	10	<b>Game</b> : Find the Water!		<p>Cubs sit in a circle. One person is chosen to sit in the centre of the circle, blindfolded. The bell is passed round the circle. Cubs may not silence the bell by holding the clapper - they have to pass it carefully though so that it does not ring. The Cub in the centre should guess who is holding the bell and should point in the direction. He/she has three chances to discover who is holding the bell. If successful, he/she gets a point. A new player enters the centre after three tries.</p>	Riki
<b>There is a deep pool at the bottom of many waterfalls. What could you find in our pool of water?</b>					
20 Jan 11:40	15	<b>Game</b> : Mumbles dropped his backpack in the icy water		Kims game items are placed in a bucket of icy water, cubs blindfolded must identify as many of the objects as they can and write them down	Akela
<b>Lets make something just for fun - maybe we can shoot some water balloons and watch some water fall.</b>					
20 Jan 11:55	25	<b>Activities</b> : Shooters	<p>Coke bottle</p> <p>balloon</p> <p>sosatie sticks with balls (pom poms/polystyrene) on the end</p>	Cut the coke bottle at the top. Keep the part with the lid. Push the balloon through the opening (lid) and fold over the lip. Put ball/pom-pom on end of sosatie stick. To shoot: Place sosatie stick in balloon and pull back. Release both balloon and stick to shoot.	Riki
20 Jan 12:20	10	<b>Activities</b> : Closing	<p>Totem, Skin</p> <p>Badges, certificates</p>	<p>Announcements</p> <p>Badge handouts</p> <p>Grand Howl</p> <p>Flag Down</p> <p>Prayer</p> <p>Dismiss</p>	Akela

Victoria Waterfall

Category

Yarn

Time to allocate (mins)

10

Story

The [Victoria Falls](#) are formed by the rapids of River Zambezi that is mostly in Zimbabwe but a part of which meanders through Zambia. The Victoria Water Falls straddles both countries. Amazingly, the water falls are not the only thing that the two countries share. They also share a host of national parks. Below are a couple of facts about the water fall to get you started.

1. The spray from the falls make the River Zambezi Rain Forest the only place that receives rainfall 24 hours a day, 7 days a week.
2. What is a Moonbow? Any ideas? Well, it is the rainbow formed by the reflection of moonlight on the water. At night, you will see the light from the moon forming a beautiful rainbow on the waters of the Victoria Waterfalls.
3. During the months of September to December, tourists enjoy 'toying with danger' on the edge of the waterfalls at the naturally formed Devil's Swimming Pool.
4. River Zambezi, the river that forms the Victoria Water Falls is the fourth largest African River after River Nile, River Congo and River Niger.
- 5 Although the most famous stretches of River Zambezi are in Zambia and Zimbabwe, the river traverses a whopping six countries that include; Zambia, Angola, Namibia, Botswana, Zimbabwe and Mozambique.
6. The Victoria Waterfalls seems to dissect the River Zambezi almost by two. It sits halfway the 1677 miles from the source to the sea.
8. After all the factors are put into place; the Victoria Waterfalls are the largest in the world. They measure 5577 feet wide and varies in height from 262- 304 feet.
9. The first European to see the waterfalls was David Livingstone. In order to see the majestic waterfalls, he stood on a small outcrop christened the Livingstone Island that is on the edge of the waterfalls.
10. It is estimated that roughly 600 million cubic liters of water hit the ground every minute on the Victoria Waterfalls.

The highlight of your tour here, without a doubt will be swimming in the Devil's Swimming Pool.

Entry written by Sharon Venn of 1st Randburg