I'm not a robot

Water is a precious natural resource. All living things need water for their survival. We cannot imagine life without water. Let it be animals or plants they require water to complete their daily metabolic activities. Plants require water to synthesize their food from the process of photosynthesis. On average, an individual uses 600 to 700 litres in a day. We all can live without food for days together but cannot even imagine surviving without water, even plants become dry and shed their leaves without water. Let us learn some more importance to water. What is Water? Water is one of the natural resources, which are found in an adequate amount. It is an essential source for the existence of life on the planet earth. It is widely used for various purposes such as drinking, washing, bathing, cleaning, cooking, irrigation, and other industrial and domestic uses. Sources of Water There are various sources of water. About 97% of the water on the Earth's surface is covered with water. The three main sources of water are: Rainwater. Groundwater – This includes water bodies like Wells and Springs. Surface water – This includes different water bodies like Reservoirs, Rivers, Streams, Ponds, Lakes and Tanks. Importance of Water We all need water for different daily activities including: Domestic Purposes include bathing, cleaning, cooking, drinking, and washing. Agricultural applications include irrigation, farming, gardening, and frost control. Other Industrial Applications. Apart from this, we drink water to: Stay hydrated Lubricate Joints Regulate the body's temperature Transport nutrients and other waste in the body. Balance the loss of water from the digestive tract and body tissues. Water Cycle Water never stops moving. The water cycle mainly describes the process of the continuous movement of water from the surface of the earth and it is usually carried out in four different stages. The entire cycle is controlled by the sun and is also known as the hydrological cycle Evaporation: In this stage, the heat from the sun heats up the water from oceans and other water bodies and evaporates the water in the form of vapours which rises up and form clouds. Condensation: The water vapour's in the clouds cools down. Precipitation: The cooled water vapours in the clouds form droplets and released in the form of Precipitation back to the earth surface in the form of rain or snow. Collection: The rainwater runs off to the ground and gets collected into the river, ponds, well, and back to the sea. As mentioned above, about 97% of the water on the Earth's surface is covered with water. Only 2 to 3% is available and safe for drinking. Rest of the water is saltwater and other two-thirds of the Earth's freshwater is frozen in glaciers and these water resources are mostly inaccessible for human use. This is the reason, we all need to reduce wasting this natural resource and conserve water for future requirements. Also, read about How Can We Conserve Water? Stay tuned with BYJU'S to learn more in detail about Water, Conservation of Water and other related topics @ BYJU'S Biology. Put your understanding of this concept to test by answering a few MCQs. Click 'Start Quiz' to begin! Select the correct answer and click on the "Finish" buttonCheck your score and answers at the end of the quiz Visit BYJU'S for all Biology related queries and study materials 0 out of 0 arewrong 0 out of 0 are correct 0 out of 0 are Unattempted View Quiz Answers and Analysis : An AI-generated image: We asked Gencraft what it could possibly look like if we had no access to clean water. Water is essential to life, and access to clean water is one of our most basic human needs. Yet, millions of people live without access to clean water. According to 2020 statistics from the United Nations World Water Development Report 2023, 26% of the world's population (about 2 billion people) don't have access to safe drinking water. In fact, the World Health Organisation (WHO) shared that some 1 million people are estimated to die each year from diarrhoea as a result of unsafe drinking-water, sanitation and hand hygiene. In 1912, the Straits Times wrote, "Singapore now has one of the finest water supplies in the world, and to get that on a tiny island which has no river much bigger than a ditch must have meant long and earnest study and a fine capacity for making the most of available means." True enough, today, our tap water quality is well within the WHO Guidelines for Drinking-water Quality, and Singapore Environmental Public Health Regulations 2019. This access to clean water in Singapore has become so commonplace that is often #TakenForGranted. Imagine this: you turn on the tap in your homes, and without a second thought, you drink a glass of the water that comes out – because you know that our tap water is suitable for drinking directly from the tap without any further filtration. Yet this access has not always been the case, and did not come naturally. This is because Singapore is one of the most water-stressed countries in the world, due to the lack of groundwater and natural freshwater bodies, as well as limited land for water storage facilities of harvested rainwater. We have gone through dry spells in the past that reduced our water stocks so drastically that our taps sometimes ran dry: in 1963 to early 1964, water levels in Singapore and in the Tebrau River area of Johor plummeted so low that authorities had to impose restrictions on water use. Another dry spell in early 1971 led to warnings of water rationing and the launch of our first "Water is Precious" campaign as part of our public education programmes to encourage water conservation. Today, Singapore is internationally recognised as a model city for water management and an emerging Global Hydrohub – a leading centre for business opportunities and expertise in water technologies. As our demand for water grows (roughly 782 Olympic-sized swimming pools of water a day!), coupled with more erratic weather changes, water shortages could potentially happen again. While we appreciate having a robust, diversified and sustainable water supply from Four National Taps, at the individual level, we should continue to form good habits in water consumption for we never know when the next water disruption might be. References : /48223/pf0000384657 and #MakeEveryDropCount #GoBlue4SG #Water #Singapore #GoBlue4SG #WeAreTotalDefence #TogetherWeKeepSingaporeStrong #WaterforPEACE Visit Facebook and Instagramfor more content. Reduction in Water ConsumptionThrough our long-term efforts in water conservation, Singapore's household water consumption dropped steadily from 165 litres per capita per day (LPCD) in 2003 to 141 LPCD in 2019.Household water consumption increased sharply during the COVID-19 pandemic - 154 LPCD in 2020 and 158 LPCD in 2021. This was a result of people spending more time at home due to safe management measures and work-from-home arrangements, and an increased emphasis on hygiene.The household water consumption returned to pre-pandemic levels of 141 LCPD in 2023, following the relaxation of COVID-19 safe management measures and resumption of business activities. We will continue our efforts to encourage water conservation.Water Conservation Education and OutreachPUB engages in community outreach efforts to raise awareness. These include the annual water conservation campaign to reinforce the importance of water conservation, and Singapore World Water Day celebration in the month of March to rally the community and drive continued awareness on the importance of water conservation and sustainability, through a variety of community and ground-up events.Preventing and Detecting LeaksPUB replaces ageing water mains and pipes over the years to minimise leaks. Regular checks are also conducted on water meter readingfs, and on water mains and pipes using technologies such as leak monitoring sensors and inline pipe inspection tools, to detect leaks.Pricing Water to Reflect Its True ValueThe price of water in Singapore reflects its scarcity value. The use of sound economic principles in pricing water is important to keep demand and supply in balance. Under-pricing water leads to over-consumption. In Singapore, water is priced to recover the full cost of its supply and production, and to reflect the cost of producing the next drop of water, which will be from NEWater and desalination.Mandating Water Efficiency RequirementsThe Mandatory Water Efficiency Labelling Scheme and minimum water efficiency standards for water fittings and appliances help consumers and businesses make more informed choices, and encourage suppliers to introduce more water-efficient fittings and appliances into the market.Large water users in the non-domestic sector are required to submit water efficiency management plans to PUB annually. This requirement encourages companies to better understand and manage their water usage, and has allowed PUB to develop water efficiency benchmarks and best practice guidelines using the data collected.Funding Water Efficient MeasuresPUB's Water Efficiency Fund (WEF) co-funds organisations, companies and community groups to implement water saving initiatives such as water recycling projects and the adoption of water efficient equipment. Since 1 July 2023, PUB has raised the funding cap for water recycling projects under the WEF from $1 million to $5 million, as part of its continuing efforts to drive water conservation efforts and promote the sustainable water management practices in the non-domestic sector. Climate change can affect our water supply, as increasing rainfall intensity could overwhelm our drainage system and create flooding, while dry weather will reduce the availability of local water catchment water for supply. As a nation with a very limited water supply, taking appropriate measures to ensure the sustainability of our water resources is a top priority for PUB, Singapore's National Water Agency. PUB has established the following Four National Taps to address our water needs: Local catchment water Imported water NEWater Desalinated water Water Loop Illustrating Singapore's Water Management Source: Climate Change & Singapore: Challenges. Opportunities. Partnerships. Our Resilient Water Resources NEWater and desalinated water are not dependent on rainfall, and have become increasingly important water sources that can strengthen Singapore's water security especially in the face of climate change. PUB is committed to ensuring a diversified and sustainable water supply through our Four National Taps and build up our water production capacities, including NEWater and desalinated water, to meet future water demand which will inexorably increase. About Us Careers