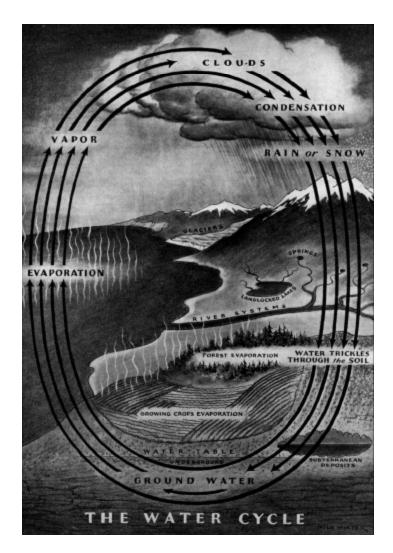
# **The Never Ending Water Cycle**



We forget that the water cycle and the life cycle are one.
- Jacques Cousteau



# Written and Designed by Soumy Ana

Muharram 1425 -- February 2004

Waqf Sunni Book

http://www.ummah.com/islam/taqwapalace

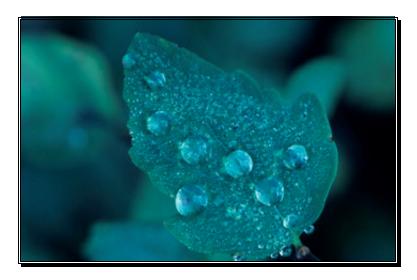
# The Lady and the Morning Glory

(Chiyo, 1703-1775)

ONCE upon a time long ago, there lived a lady named Chiyo, and she had a little house, and a little garden, and a little well in her garden. One morning she went to her well to draw some water. But, ah me! what should she find there? Lo and behold, since last she came to that spot, a morning glory had twined its vine all about the rope that held the bucket,—gay little blossoms like bright little faces, climbing that rope, and nodding and smiling in all the joy of life!

Now what was to be done, pray tell? Chiyo had come there for water. Should she break those slender green tendrils, tear down those tiny acrobats from their airy swings, and draw up the bucket? No! ah, no! Too warm a tenderness filled her heart. A moment she stood, nodding and smiling back at the blossoms; then she turned away, leaving the rope to the little climbers. Off to a neighbor's house she must trudge with her pail, and when she reached there, this is what she said:—





Innumerable as the stars of night,
Or stars of morning, dewdrops which the sun
Impearls on every leaf and every flower.

- John Milton

Once upon a day, a dewdrop was comfortably stretching on a leaf. She met the sun and struck a conversation with him. After a few minutes of pleasant conversation, she asked:

'Where have you been, Sun, before now?'

'I have been around the world. Then this morning I asked the permission to Allaah to rise again, and one day I am told, I will rise, not from the East, but from he West!'

'Amazing! And what are you here for?'

'Oh! That's a question that would require a lifetime to answer.

Among other things, I make sure the Water Cycle is been provided.'

'What's the Water Cycle, Sun?'

'You mean you do not know?'

'Nope'

'Where do you come from, Dew?'

She thinks deeply.

'I am not sure but the last time I remember, I fell from the eyes of a little girl. I do not remember why she cried for, but she dropped me here no later than yesterday. I woke up in this charming bed.

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AlHamdulillah, we drops of water, we can form well on any plant because we slide on plants like children slide on ice, and we stay together. That's our favorite place to be.

'And before that, you might have been so many different things.' 'Could I?'

'Yes. How old are you?'

'I thought I was born of today, in the green plush of this leaf, but you made me remember the little girl...'

The Sun laughs

'That's as far as you can remember?'

She thinks more and more and more... and spends many minutes, then an hour trying to stretch her memory, then she says: 'Memories are strange things. We think we have lost them because it is so nice to be caught up in the present moment, but when we look for them, they come back running at us one after the other until we are so much caught up in them, we soon forget the present moment. Do you remember, Sun, the dinosaurs? Well, I remember them clearly now, but they do not exist anymore...' 'That's right. You are so old I can say you almost witnessed the beginning of this world. However, you have taken so many forms, you might not remember them all. Water is the only thing in nature that can be a gas, liquid, or solid. It is, so to speak, like the heart. The Prophet (peace and blessings of Allaah be upon him) said: "[The heart] changes more than a pot of rapidly boiling water." (Reported by Ahmad, 6/4; al-Haakim, 2/289; al-Silsilat al-Saheehah,

'I'd buy that one!'

1772).

'Interesting, uh? See how much you can change! The Prophet (peace and blessings of Allaah be upon him) also gave another example of the heart:

"The heart (qalb) takes its name from its constant changes (taqallub – alteration, variation, ups and downs). The likeness of the heart is that of a feather at the root of a tree, being turned over and over by the wind."

(Reported by Ahmad, 4/408; Saheeh al-Jaami', 2364).'



"H2O is hot water, and CO2 is cold water"

In 1854 the Great White Chief in Washington, President Franklin Pierce, made an offer for a large area of Indian land and promised a reservation, for the Indian People. This is the full text of Chief Seattle's reply to the offer.

"How can you buy or sell the sky, the warmth of the land? The idea is strange to us. If we do not own the freshness of the air and the sparkle of the water, how can you buy them? Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory experience of my people. The sap which courses through the trees carries the memories of the red man. [...]

The rivers are our brothers, they quench our thirst. The rivers carry our canoes, and feed our children. If we sell you our land you must remember and teach your children that the rivers are our brothers, and yours, and you must from now on give the rivers the kindness you would give any brother."

'But... Tell me more about me, Sun.'

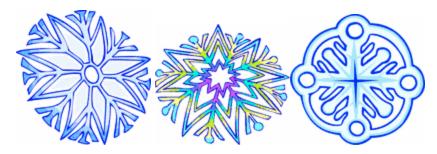
'Well... Let's see... If I had been far away from the earth on my Winter annual travel, you might have frozen and be as crisp as a toast.'

'You think so?'

'Yes, I have seen it!'

'Then, Shukrulillaah for you are close today, so close we can talk. What else could I have been?'

'You could have been a snow flake and reflect light as a mirror. You could have had a beautiful dress made of delicate embroideries, very unique to you.'



'Really? O, I cannot wait! When does Winter come?' 'Oh! Not yet little Dew. See how the heart is changing? You do not want it now. Winter will come soon enough, believe me, and you will maybe freeze.'

'Does it hurt?'

'Not the least! You will probably find it fun, but you will certainly get to one form to another overnight and you will not have time to enjoy the form you like most or admire your new dress for a long time before you become droplet again or are eaten by children or animals, or else... and, not only that, when water freezes inside clouds, up in the air, ice crystals form. It is because many of you crystals join together that snow flakes form. Once the flakes are heavy enough they fall to the ground as snow. However, snow can fall in different ways. Snow can drift to the ground lightly as flurries, fall heavily as a snowstorm, or pile up quickly blown by strong winds in a blizzard. Before you know it, you might be buried into many other flakes and not see the light of day for many weeks, even months depending where you fall! You might also become Graupel.'

'What is gaupel, Sun?'

'It is snowflakes that have become small rounded pellets, usually two to five millimeters in diameter. It is sometimes mistaken for hail. Oh, and worse, you might become sleet!'

'What is sleet, Sun?'

'Sleet is a form of snow that begins to fall, but melts on its way down. It then re-freezes in the air and falls covering the ground with a wet slushy mess. Soon enough, you become mud or you can freeze there for the remainder of the winter without being able to move a wink of an eye...'



'How bleak!'

'Some enjoy it... But you... I'd be surprised, seeing how much you like being here. But, to look at things on the bright side, even though snow is cold, it protects plants and small animals that live underground. Under the snow it is warmer than it is out in the cold blowing wind. After all, you might also find fun to dress in pink during the winter, what do I know.'

# **Paper Chain Snowflakes**

Take a sheet of paper. Fold the paper in half, then in half again to make a square. Using scissors, round the corners of the square making sure you leave part of each edge intact.

Fold the circle in half, then in half again, then in half. The more folds the more intricate the snowflake. The shape of the paper should look like a slice of cake. Cut out small triangles, circles, lozenges, etc. on the edges.

Unfold the paper to reveal your paper chain snowflake.

'Pink! We were told water is so translucent, prophet Suleiman (AS) invited Bilqis, the queen of Sheba into his palace, the floor of which was laid in glass and shimmering. Thinking it was water, as she stepped on the floor, she lifted her skirt slightly above her heels, for fear of wetting it. Solomon pointed out to her that it was made of

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solid glass. She reverted to Islam when she saw the power of Suleiman (AS) could only come from Allaah.

It was said to her: "Enter As-Sarh "(a glass surface with water underneath it) or a palace, but when she saw it, she thought it was a pool, and she (tucked up her clothes) uncovering her legs. Solomon said: "Verily, it is Sarh paved smooth with slab of glass." She said: 'My Lord! Verily, I have wronged myself and I submit (in Islam), together with Solomon, to Allah, the Lord of the Alamin (mankind, jinns, and all that exists)." (Surah 27: 38-441)'

'Yes! Many people think of snow as white and pure, but it isn't always white and is rarely pure. During the 1930's when many houses were heated by coal, snow was often gray. The coal dust was blown up into the snow clouds, discoloring the snow. Also in some parts of the country where the soil is red, the red dust blown into the clouds cause the snow to be pink.

Snow is not always the same size either. In Montana, in 1887, the largest snowflakes on record fell to the earth. Each snowflake was fifteen inches in diameter! By the way, do you know that water becomes bigger when it freezes?

I bet you might find interesting that when you become snowflake, you look like a tree branch with six sides. If you live in Stampede Pass in the state of Washington, you will see so many dresses among snowflakes, your head will spin. Each year this town has an average snowfall of 430". What a party of beautiful outfits, so much to see! Too bad one has to get close and use a magnifier! The Sun can but melt them every times he tries, so I just report what people are saying they have seen.





Something else, Dew. Ice is very powerful, even though you have to team with other drops. Think! The ice on Greenland approaches 2 miles in thickness in some places and is so heavy that land is compressed way below sea level. And in 1848, Niagara Falls stopped flowing for 30 hours because of an ice jam blocking the Niagara River. Do you know the Niagara Falls river?!'

'It is a very powerful river indeed, but how much more powerful the ice, uh?'

'I remember a saying, Sun, that tells us that nothing is like what it seems.'

'I'd love to hear it. Dew.'

The angels asked, "O God! Is there anything of Thy creation stronger than rocks?" God said, "Yes; iron is stronger than rocks, for it breaketh them." The angels said, "O Lord! Is there anything of Thy creation stronger than iron?" God said, "Yes; fire is stronger than iron, for it melteth it." And the angels said, O defender! Is there anything of Thy creation stronger than fire?" God said, "Yes; water overcometh fire; it killeth it and maketh it cold." Then the angels said, "O Lord! Is there anything of Thy creation stronger than water?" God said, "Yes; wind overcometh water: it agitateth it and putteth it in motion." They said, "O our cherisher! Is there anything in Thy creation stronger than wind?" God said, "Yes, the children of Adam, giving alms; that is, those who give with their right hands and conceal it from their left, they overcome all." 'How beautiful!'

'Indeed. Well, after al this, I prefer to be a Dew for the moment' 'You know what? The fastest speed reached by a falling raindrop is 7 mph.'

'Not that fast, isn't it, coming from high above?

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'No. And you might as well enjoy the ocean since 91% of the earth's rain falls directly back into the ocean! But I wouldn't fall into it at this time of the year.'

'Why is that?'

"Well, the underwater mating song of the toadfish is so loud that sometimes humans on the shore can hear it. What about you, then!"

Laughs.



What runs but never gets tired? Water

## The birth of a water fall:

Waterfalls may be born from a few drops of water coming from the mountains. They then form countless tiny waterfalls fueled by melting snow and cascading down slopes. Some waterfalls were born because of the erosion of rocks by the water in areas where the rocks are not hard. Some of the most spectacular waterfalls were created by "hanging valleys" carved by glaciers. It all begins with a V-shaped river valley where a glacier slides. The glacier grinds the rock beneath into a broad, deep U-shaped valley. After the glacier melts, the waters form the falls.



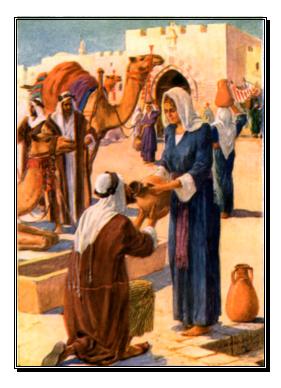


In the struggle between the stone and the water, in time, the water wins."

Chinese proverb

# The Niagara Falls:

Niagara Falls are actually three rivers. The falls were formed 10, 000 years ago. The height of the American Falls is 176 feet. Each second, 150,000 US gallons of water fall into the beautiful Niagara River. The length of the brink of the American Falls is 1.060 feet. The "Horseshoe" or Canadian Falls is 2,600 feet long, with a height of 167 feet. Each second 600,000 gallons of water flows over the Horseshoe Falls. In winter, an ice bridge follows its banks for several miles. On February 24, 1888, 20,000 people watched and tobogganed on the ice bridge!



During the campaign of Hudaybiya, the Companions complained to God's Messenger about the lack of water. The Messenger took an arrow out of his arrow-bag and ordered them to put it in the well of Samad. When they did that, the water of the well began to gush. During the campaign, all of the Companions drank from it and did ritual ablution' with it.

There are many examples of the Messenger's miracles concerning water. They were related by numerous Companions and transmitted through various reliable channels.

#### Narrated Anas bin Malik:

"I saw Allah's Apostle when the 'Asr prayer was due and the people searched for water to perform ablution but they could not find it. Later on (a pot full of) water for ablution was brought o Allah's Apostle. He put his hand in that pot and ordered the people to perform ablution from it. I saw the water springing out from underneath his fingers till all of them performed the ablution (it was one of the miracles of the Prophet)."

(Sahih Bukhari, V. 1, B. 4, N. 170)

# Don't empty the water jar until the rain falls.

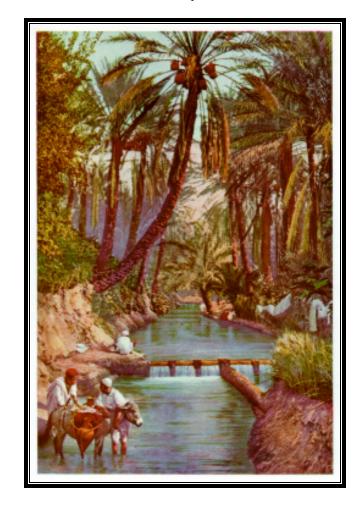
- Philippine proverb

# Don't throw away the old bucket until you know whether the new one holds water.

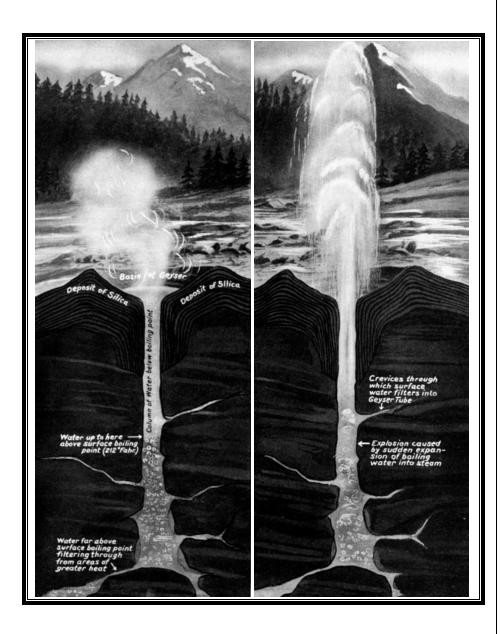
- Sweedish proverb

# When you drink the water, remember the spring.

- Chinese proverb



# Geysers



'You know so much, Sun!'

'No wonder! I have been all over the world! Actually, I can be everywhere I want or almost, and I have seen so many things everyday. I burst telling anyone who wants to know.' 'That's the spirit of Islam, Sun. Never hide your knowledge, especially when it can open horizons for others...' 'But if you really want to have some fun, Dew, go to St. Louis, America. A new man-made fountain opposite the Gateway Arch in St. Louis is now the highest geyser, 6,000 feet. The geyser is powered by three 800 hp pumps and discharges water at up to 200 feet per second. The geyser will keep 1,100 gallons of water, weighing 9,200 pounds, in the air when in operation. What an ovation to the power of water!'

'We're so flexible! I had no idea!'
'You do.'



# Little drops of water

Little drops of water, little grains of sand, make the mighty ocean and the beauteous land.

And the little moments, humble though they may be, make the mighty ages of eternity.

Little deeds of kindness, little words of love, make our earth an Eden, like the heaven above. So our little errors lead the soul away, from the paths of virtue into sin to stray.

Little seeds of mercy sown by youthful hands, grow to bless the nations far in heathen lands.

Glory then for ever be to God on high, beautiful and loving, to eternity.

Words: Julia Carney, 1845



# **Aspects of Water in Islam**

#### **Public baths & Fountains:**

The many fountains, cisterns, and public baths that can be found in the Islamic world is a testimony to the central role water has played until now in Muslim society.

The *hammam*, the public bathhouse, is a tradition that would begin with King Solomon and Bilqís, the Queen of Sheba (see Al-Tha`labi, *The Stories of the Prophets*). Muslims went to the *hammam* to purify themselves and because the steam and hot water also served medicinal purposes. Today *hammams* are only visited in North Africa.

Sabils that still exist through the Ottoman Empire were social places. They were charitable donations from rich and powerful citizens, and their water was free for all. Buildings were designed around them. Many sabils are combined with small madrasas (schools) on the first floor. They are called sabil-kuttub, literally "fountains of books" or "fountain schools". The Prophet (SAWS) said: "water for the thirsty and knowledge for the ignorant". There, they are often decorated with fine ornaments of wood or stones, ceramics. (1)

#### "Islamic Law:

The basic principle of Islamic water law is that water is available to all members of the Moslem community. Moslems believe that the Prophet Mohammed declared that water should be, together with pasture and fire, the common entitlement of all Moslems. He prohibited the selling of water. He also established the concept of the *harim* (protected areas around a water point) on which it was forbidden to dig a new well in order not to damage the quality or reduce the quantity of the water in the existing ones. **Islamic water law** 

# recognizes two important water rights:

- 1- the right of thirst, the right to take water to quench ones thirst or to water one's animals, and
- 2- the right of irrigation; the right to employ water to cultivate land. Other regulations deal in detail with situation arising in connection with different types of bodies of water (lakes, springs, rivers and ground water). Obligations exist regarding the construction, operation and maintenance of waters and structures, and the manner and timing of use. There are also procedures for the resolution of conflicts among users. At the local level, in particular, these and other rules that were established based on the interpretation of the Prophet's guidelines, are still followed." (2)

#### **References:**

- (1)Drops of Faith: Water in Islam, by Francesca De Chatel.: http://www.islam-online.net/english/Contemporary/2002/11/Article02.shtml
- (2) Institutional Framework of the Water Sector: http://www.semide-ps.org/institutions.htm

# Shape:



Those who surrender to God all selfish attachments are like the leaf of a lotus floating clean and dry in water. Sin cannot touch them.

Hinduism- Bhagavad-Gita 5.10-12

'Do you know, Dew, that the humans represent you as a teardrop?' 'How funny!'

'Yes, they do.'

'How little do they know! I see that not many people will wake up real early to look at me, all round like a loaf of bread. I change so many times of shape, how can they even think of me as a tear drop all the time! Look at all my friends here, small raindrops (radius < 1 mm) are spherical; larger ones really look like a hamburger bun. When they get larger (radius < 4.5 mm) they could look like a parachute with a tube of water around the base, well, before it breaks up into smaller drops.'

'Just right, Dew. Water has the highest surface tension among liquids, which means you like to stick to yourself all the time. Mercury for instance is higher; this is why it is so heavy and compact. This is also why when you look at a glass of water, the water "rises" where it touches the glass.'

'You do not know how much plants are happy that water has a high surface tension, Sun.'

'As a matter of fact, I do. They use it to suck you from the ground up through their roots and stems.'

'Right! Imagine, trees lower air temperature by evaporating water in their leaves after pumping us up from the ground! Trees are really our companions, they improve water quality by slowing and filtering rainwater as well as protecting aquifers and watersheds. Wow, feels good to be cleaned once in a while! Trees also provide protection from downward fall of rain, sleet, and hail as well as reduce storm run-off and the possibility of flooding, Without them, and thanks to Allaah, water on earth would be all over the place. Thanks to their action, *Masha Allaah*, we drops can visit all the beautiful places on earth and it's fun to go underground, up in the sky, inside living creatures and so on and so forth. See, it is said that in a 100-year period, a water molecule spends 98 years in the ocean, 20 months as ice, about two weeks in lakes and rivers, and less than a week in the atmosphere. Well, I do not remember all that, but I trust it is true.'



In every glass of water we drink, some of the water has already passed through fishes, trees, bacteria, worms in the soil, and many other organisms, including people... Living systems cleanse water and make it fit, among other things, for human consumption.

- Elliot A. Norse, Animal Extinctions

'No wonder since water is constantly changing environment. Think that each day I, the sun, evaporates 1,000,000,000,000 (a trillion) tons of water!'

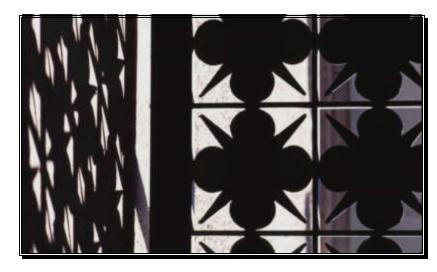
'O, well, wait a little bit for me, then, Sun.'

'You are alright for now Dew, shade trees can make buildings up to 20 degrees cooler in the summer, that's why you will feel cool for a long time before I can evaporate you.'

'How exciting! See, when you come, we can go everywhere even though we depend on you for part of the destination for our travel. At least with you or a source of heat like the fire or heaters we know we are going up.'

'Not always high up, Dew. There is water in the air people are breathing. They cannot see it, because it is in the form of an invisible gas, the water vapor.'

'Sure. We often come to the houses and stick to the windows to look at what people are doing inside. It's fun. Often enough we return to the ground as rivers because the windows are warm. But never mind, we stay long enough to tell stories and share.' 'Good for you!'



Thanks. I think that we can go anywhere because we have no color. Most water has tiny particles and gas bubbles in it, but we reflect colors that surround the water. Under a blue sky we look blue. At night there is no reflection so we look black.

Pure, we have no smell or taste so that we can mix with many other minerals and liquids. And everybody loves water.

I think the most beautiful colors that come from us are the rainbow

I think the most beautiful colors that come from us are the rainbow colors.'

'I have wondered about this for so long. Why don't I ever see rainbows in a snowstorm?'



"This I can easily answer. Rainbows are created with light refracting from water droplets in the air.

In the winter these droplets are frozen, so the light does not take the form of a rainbow. Do you know where you are, Sun, when people see a rainbow?'

'O my! I know that. Most people have never noticed that the sun is always behind them when they face a rainbow, and that the center of the circular arc of the rainbow is in the direction opposite to that of the sun. The rain, of course, is in the direction of the rainbow.' 'And what makes the bow, do you know?'

'Do tell me, Dew.'

'Well, to simplify, consider the road a ray of monochromatic light has to take through a single spherical raindrop. Imagine how light is refracted as it enters the raindrop, then how it is reflected by the internal, curved, mirror-like surface of the raindrop, and finally how it is refracted as it emerges from the drop.'

'Clever!'

'That's Allah's wisdom who creates beautiful sights for our eyes.'

# Location?

'Just How Much Water is There, Sun?'

polar regions and in Greenland.'

'If you want to know exactly, the earth contains 326 million cubic miles. A cubic mile is an imaginary cube, a square box, measuring one mile on each side. A cubic mile of water equals more than one trillion gallons. About 3,100 cubic miles of water, mostly in the form of water vapor, is in the atmosphere at any one time. Of the freshwater on Earth, much more is stored in the ground than is available in lakes and rivers. More than 2,000,000 cubic miles of fresh water is stored in the Earth, most within one-half mile of the surface. Only 60,000 cubic miles of water is stored in lakes, inland seas and rivers. The biggest storage of water is 7,000,000 cubic

'I beg you pardon, Sun. But see, that's a little bit too complicated for me. I'm afraid, I do not understand numbers.'

miles of water found in glaciers and icecaps, mainly located in the

'I see, Dew. Please, forgive me. If you prefer, water is the most common liquid on earth. Earth is the only planet in the solar system with liquid water.

We have 1,358 billion cubic kilometers of water covering 73% of the surface of the earth, but only 3 % of the earth's water can be used as drinking water; the rest is toxic. However, 75% of the fresh water is frozen into the ice cap.

The Earth's water supply is made up of: 97% Oceans; 2% Icecaps/Glaciers; 1% Fresh Ground Water.

The amount of water in the earth's environment never changes, and it circulates all the time, whether it is as a liquid (fresh water, seawater, rain, tiny droplets in clouds), as a gas (water vapor) or in its solid state (snow, ice or hail). You might be a Dew that a dinosaur once processed in his body since there is also water inside living organisms. The toxic water becomes fresh water after evaporation. That's where I come into action.

I can say, you are very popular, you are a star!



# **Water Distribution Demonstration**

( Courtesy of the American Water Resource Association *AWRA*: http://www.awra.org/)

1) Fill one 1,000-mL graduated cylinder with colored water to the 1,000 mL line. This represents the Earth's entire supply of water. Pour 28 mL of the total water into a second 1,000-mL graduated cylinder. The 28 mL of water represents the Earth's total freshwater supply. The remaining 972 mL of water is saltwater that occurs primarily in oceans.

Divide the 28 mL of freshwater by pouring into smaller containers; 23 mL for icecaps and glaciers, 4 mL for ground water, 2 drops for surface water, and 1 drop for the water in the atmosphere and soil.

#### **Ouestions:**

- 1. Where is most of Earth's water found?
- 2. Can cities near oceans use the water from the oceans for households and industry?
- 3. Can salts be removed from water?

#### Answers

- 1. Oceans
- 2. No, the ocean water contains salts that are harmful to humans, kill plants, and corrode metals.
- 3. Yes, but the desalinization process is very expensive.



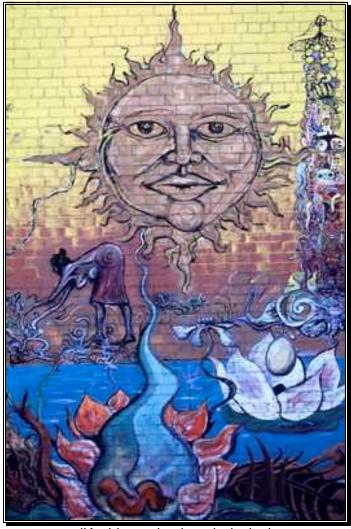
"No matter how dark the clouds seem, they are only clouds. The sun is always shining, the sky is always light blue. The clouds are just droplets of water, gathered together to tease people who don't remember the truth."

---Chris Collins

You put water in a cup it becomes the cup, you put water in a bottle it becomes the bottle, you put water in a tea pot it becomes the tea pot... be like water my friend

Shaolin Kung Fu - Lee Jun

Empty your cup so that it may be filled



(Kachina, primal earth design)

We can't help being thirsty, moving toward the voice of water.

Milk drinkers draw close to the mother.

Muslims, Christians, Jews, Buddhists,

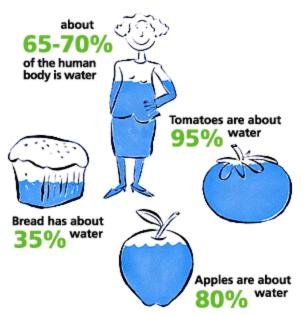
Hindus, shamans, everyone hears the intelligent sound and moves with thirst to meet it.

- Jeladuddin Rumi (1207-1273)

Water is one of the most important things in life; this is why it is as much coveted in the desert as diamonds. If a desert person could trap you in a jewel, he would give you as a gift to his most beloved.

A French love song goes: "Je te donnerai des perles de pluie venues d'un pays où il ne pleut pas... I will offer you pearls of rain coming from a country where it does not rain..."

Allaah has made every living thing dependent on water for its survival. Allaah even says that every living creature comes from the water! A drop of water is truly a giver of life, thanks to Allaah! In people, water makes for two-thirds of body cell matter and 90% of the fluids present in the body.



Picture source: http://www.wrc.govt.nz/ws/ww/ff.htm

Our bodies are molded rivers.
- Novalis

Some vegetables and fruits like pumpkins, berries, etc. are made of more than 90% water.

This is very useful for the people who live in places where it rains very little; they can find water in cactuses for instance.

About two thirds of your body is made up of water, that is more than 60 percent of the human body.

The brain is composed of 70 percent water. Blood is 82 percent water. The lungs are nearly 90 percent water. Bones are 25% water.

Although a person can live without food for more than a month, a person can only live without water for approximately one week.

Every day, the body excretes two to three liters of water: 1.4 liters through the kidneys, about 0.8 of a liter through the skin, 0.8 of a liter through the lungs and a very small amount through the intestines. This is why it is so important for humans to drink at least eight glasses of water a day, about 2.5 quarts of water each day to make sure we are well hydrated.

Even fish need water that they get from the smaller fish they eat. In some organisms like jellyfish up to 90 percent of their body weight comes from water. Even though they live in the ocean, they do not drink the salty waters of the oceans. If they did, they would get sick.

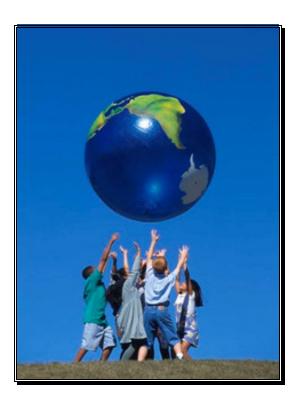
If humans drunk salty waters, they would feel dizzy, start to hallucinate and would finally die. Because the body evacuates salt through urine, but only one third of the urine water is made of salt. If someone drunk salty water, his urine would be filled with much more salt than his body can handle. His body would have to produce more water to evacuate all this salt. If this person does not drink plain water, his body will take water from his tissues. So the more he will drink of the ocean water, the more he will be dehydrated.'

## **SEA WATER facts:**

Sea water, loaded with mineral salts, weighs about a pound and a half more per cubit foot than fresh water at the same temperature.

The only rock that floats in water is pumice (a light glass formed on the surface of some lavas.)

Water expands and lightens when frozen. The ice floats because water is heavier than ice.



Human beings are made up mostly of water, in roughly the same percentage as water is to the surface of the earth.

Our tissues and membranes, our brains and hearts, our sweat and tears--all reflect the same recipe for life, in which efficient use is made of those ingredients available on the surface of the earth.

We are 23 percent carbon, 2.6 percent nitrogen, 1.4 percent calcium, 1.1 percent phosphorous, with tiny amounts of roughly three dozen other elements. But above all we are oxygen (61 percent) and hydrogen (10 percent), fused together in the unique molecular combination known as water, which makes up 71 percent of the human body.

- Al Gore, Earth in the Balance

#### **HOW MUCH WATER?**

Here's a list of some common foods, how many gallons of water it takes to produce a single serving of each one:
Milk, salad, rice, bread, orange juice?

#### **Answers:**

65 gallons to produce a glass of milk 6 gallons to produce a very small salad 35 gallons to produce one cup of rice

150 gallons to produce a loaf of bread

50 glasses of water are required to grow enough oranges for one glass of orange juice

We need 65,000 gallons to produce a car. It takes 2,072 gallons of water to make four new tires. It takes 1,851 gallons of water to refine one barrel of crude oil.

Water is so important in Maori (New Zealand) tradition that five distinctions are made:



Waiora -the purest form of water, the source of life and well-being Waimora - ordinary clean freshwater

Waikino - water which has been disrupted in its flow

Waimate - water which has lost its mauri or life force. It is dead, damaged or polluted and

Waitai - the sea, saltwater, the surf and the tide.

# **Auditing Water Use** (Adapted from South Florida Water Management District, "Auditing Your Water Use") A. Bath 1. Volume of water used (circle one): (Use answer in A3) 1/2 of tub = 76 liters 1/3 of tub = 57 liters 2/3 of tub = 106 liters 2. Number of baths taken daily:\_\_\_\_\_ per day. (Use answer in A3) 3. Daily water usage for bathtub: $A1 \times A2 =$ \_\_\_ liters per day B. Toilet 1. Liters per flush liters. (Use answer in B3) If you know your fixture is a low-volume model, enter 13 liters. If you do not have a low-volume model, enter 26 liters. 2. Count the number of times you flush the toilet a day: per day (Use answer in B3) 3. Daily water usage from toilet: $B1 \times B2 =$ \_\_\_\_ liters per day. C. Shower 1. Average length of shower: \_\_\_\_ minutes (Use answer in C3) 2. Flow rate of water used in shower: \_liters per minute (Use answer in C3) To measure flow rate of water: a. Adjust the shower's water flow as you would normally. b. Record the time it takes to fill a 2 liter bottle with water. Convert the measurements to liters per minute. Example: liters per minute= 60 seconds/ 1 minute x 2 liters/time to fill bottle in sec. 3. Average shower water, use $C1 \times C2 =$ liters (Use answer in C5) 4. Number of showers taken daily: per day. (Use answer in C5) 5. Daily water use for showers C3 x C4 = \_ liters per day.

D. Faucet
1. Use the procedure described in the "Shower"
section to measure your flow of
water from faucets in liters per minute. (Use answer in D3)
2. Determine the time you spend running water
during the day for the following:
Tooth brushingminutes per day
Drinkingminutes per day
TOTAL minutes per day (Use answer in D3)
3. Daily water use for faucet: D1 x D2 (total) =
liters per day.
E. Dishwasher
1. Loads done for your whole family each week:
loads per week.
2. E1 divided by $7 = \underline{\hspace{1cm}}$ loads per day.
(Use answer in E3)
3. Daily water used for Dish washing:
E2 x 60 liters per load = $\_$ liters per day
F. Clothes washer
1. Loads done for your whole family each week:
loads per week
2. F1 divided by $7 = \underline{\hspace{1cm}}$ loads per day.
(Use answer in F3)
3. Daily water used for clothes washing: =
F2 x 144 liters per load =liters per day
TOTAL DAILY WATER USE = liters per day
( Add the liters per day totals.)

Water is so important, some people make prayers for the rain to come.

"We never know the worth of water till the well is dry." -English proverb.



# O Lord.

grant that in some way it may rain every day, say from about midnight until three o'clock in the morning, but, you see, it must be gentle and warm so that it can soak in; grant that at the same time it would not rain on campion, alyssum, heliaanthemum, lavender, and the others which you in your infinite wisdom know are drought loving plants - I will write their names on a paper if you like - and grant that the sun may shine the whole day long, but not everywhere (not for instance, on spiraea, or on gentian, plantain lily, and rhododendron), and not to much; that there may be plenty of dew and little wind, enough worms, no plant-lice and snails, no mildew, and that once a week thin liquid manure and guano may fall from heaven.

#### Amen.

- Karel Capek, The Gardener's Year, 1929

"When you plant lettuce, if it does not grow well, you don't blame the lettuce. You look for reasons it is not doing well. It may need fertilizer, or more water, or less sun. You never blame the lettuce. Yet if we have problems with our friends or family, we blame the other person. But if we know how to take care of them, they will grow well, like the lettuce. Blaming has no positive effect at all, nor does trying to persuade using reason and arguments. That is my experience. No blame, no reasoning, no argument, just understanding."

■ Thich Nhat Hahn



For the benefit of the flowers, we water the thorns, too. Jewish saying



Other people are hunters of the fog; they build constructions that look like boat sails in order to catch humidity of the air.' 'Really? How does it work exactly?'

'People have collected fog to drink for centuries. Two thousand years ago, writers described how inhabitants of the Canary Islands gathered fog droplets trapped by trees. Today, the stones are still here.

In Chile, today a fog collector supplies 700 people with 15,000 liters of water every day.

The collection of air humidity existed since prehistoric times. The most impressive example is a dew pond found at Theodosia, a Byzantine city dating to about 500 BC. Pipes collected water to the town from a hill where 13 piles of limestone, 40 feet tall and 100 feet square, collected about 14,000 gallons of water every day. Dew Ponds are made by covering hollow pond (3 feet deep –30 or more feet wide) with a coating of dry straw. Then the straw in turn is covered by a layer of clay, which is strewn with stones. During the hot day, the earth stores a considerable amount of heat, while the pond, protected from this heat by the non-conductivity of the straw, is chilled by the process of evaporation from the puddled clay. During the night the warm air is condensed on the surface of

Even trees are smart. The fountain trees permit inhabitants or dry areas to have constant reserves of water.

the cold clay. Water gradually fills the pond on top night after night.

Fog droplets are tiny, you see, 1-40 micrometers, and they have a slow velocity, they go less than1-5cm/s, which allows fog to travel horizontally and permits vertical structures like trees to collect its moisture.

Allah has made humans and animals such clever creatures. Many desert plants are succulents and they store water in their swollen stems or leaves; they often catch the water from the fog or morning dew.

Insects too have turned into fog collectors, and they may have been those showing the way to do it since humans always imitate nature.

See, a desert beetle turns fog into drinking water with its wings. He faces into the wind with its wings aloft. Fog droplets stick to the wings. When they are big enough, they roll down into the beetle's mouth.

For the same reason, cool stones or any exposed metal surface will collect dew overnight as the temperature drops. The desert is a perfect place for that since it is very cold at night and hot during the day.



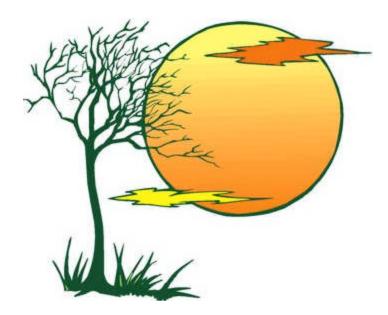
The bare earth, plantless, waterless, is an immense puzzle. In the forests or beside rivers everything speaks to humans. The desert does not speak.

I could not comprehend its tongue; its silence....

- Pablo Neruda

# ANIMALS AND WATER:

Elephants can smell water up to 3 miles away! An elephant's trunk can hold 2 gallons of water! Cockroaches can survive under water for up to 15 minutes



"Day after day we looked for rain, and day after day we saw nothing but the sun. Lavender that we had planted in the spring died. The patch of grass in front of the house abandoned its ambitions to become a lawn and turned into the dirty yellow of poor straw. The earth shrank, revealing its knuckles and bones, rocks and roots that had been invisible before."

- Peter Mayle

[Reminds one of the 1999 drought conditions in the U.S.A.]

'Dew, I always wondered how you drops fell from the sky. I mean I am an expert on water vapor and I understand the water cycle, but how exactly is it that you do not stay high in the sky?

'Oh, that? It is like the window when someone cooks inside and the vapor of the cooking reaches a window. Because the air outside is cold, the vapor becomes liquid again.

In order to have rain you must have a cloud, right?' 'Right.'

'A cloud is made up of water in the air. What you cannot see, Sun, is that along with this water are tiny particles, little pieces of salt leftover after sea water evaporates for instance, or a particle of dust or smoke. You talked yourself about the snow becoming gray

or pink. Here you are! Condensation occurs when the water vapor wraps itself around the tiny particles. Each particle becomes a tiny droplet between 0.0001 and 0.005 centimeter in diameter. Each droplet bumps into another droplet. The bigger droplet "eat" the smaller droplet, and so on and so forth. Yes, they eat each other. Soon the big droplet is so heavy that the cloud can no longer hold it up and it starts falling. As it falls it eats up even more droplets. We can call the growing droplet a raindrop as soon as it reaches the size of 0.5mm in diameter or bigger. If it gets any larger than 4 millimeters, however, it will usually split into two separate drops.



#### **EVAPORATION:**

A single birch tree will give off 70 gallons of water per day in evaporation. An acre of corn will give off 4,000 gallons of water per day in evaporation Popcorn pops because water is stored in a small circle of soft starch in each kernel. As the kernel is heated, the water heats, the droplet of moister turns to steam and the steam builds up pressure until the kernel finally explodes to many times its original volume.

Approximately 80% of all evaporation is from the oceans, with the remaining 20% coming from inland water and vegetation.



As the ocean is never full of water So is the heart never full of love.

If you love something, set it free; If it returns, it's yours If it doesn't, it never was.

The Lord carries some people to deep water, not to drown but to cleanse The three authors unknown

# **ISLAM**

'The first Muslims lived in a desert, so they were very concerned about water conservation. The Noble Qur'an mentions the Arabic word for water (plama') 63 times. Imagine, each Prophet (may Allaah bless them all) has an intimate story with water.

**Prophet Adam** (AS) was made from water. Allah took a handful of the dust of the earth and mixed into it the colors, white, black, yellow and red. That is the reason why men are born different colors. When Allah mixed the dust with water, it turned

into potter's clay that makes a sound. It was fermented and had a smell. Iblis passed by, wondering what was going to be made of that clay. From the clay Allah created Adam. he molded his form with His own hands and blew His spirit into him. Adam's body quivered as life was imbued into it. Verily His Command, when He intends a thing is only that He says to it, "BE!" and it is! (Quran 37:82).

# Allah the Almighty declared:

"Verily the likeness of Jesus, in Allah's Sight is the likeness of Adam, He created him from the dust then He said to him. "Be!" -- and he was." (Quran 3:59).

# Prophet Ayoub (AS) was cured by water.

Almighty Allah also instructed: "Remember Our slave Job, when he invoked His Lord saying: "Verily! Satan has touched me with distress (by losing my health) and torment (by losing my wealth)!" Allah said to him: "Strike the ground with your foot: This is a spring of water to wash in and cool and a refreshing drink." And We gave him back his family, and along with them the like thereof as a Mercy from Us, and a reminder for those who understand. (Quran 38:41-43)

Prophet Ismaiil (AS), son of Prophet Ibrahiim (AS) is linked to the holy Zamzam spring. Ibn Abbas narrated: "The first lady to use a girdle was the mother of Isma'il. she used a girdle so that she might hide her tracks from Sarah (by dragging it). Ibrahim brought her and her son Isma'il while she was suckling him to a place near the Kaba under a tree on the spot of ZamZam at the highest place in the mosque. During those days there was nobody in Mecca, nor was there any water so he made them sit over there and placed near them a leather bag containing some dates and a small water skin containing some water and set out homeward." Ibn Abbas's narration continued; "Isma'il's mother went on suckling Isma'il and drinking from the water (she had) When the water in the water skin had been used up, she became thirsty and her child also became thirsty, She started looking at him (Isma'il) tossing in agony. She left him, for she could not endure looking at him, and found that the mountain of As-Safa was the nearest mountain to her on that land, she too on it and started looking at the valley keenly so that she might see somebody, but she could not see anybody. Then she descended for As Safa and when she reached the valley, she tucked up her robe and ran in the valley like a

person in distress and trouble till she crossed the valley and reached the mountain of Al Marwa. There she stood and started looking expecting to see somebody, but she could not see anybody. she repeated that running between Safa And Marwa seven times."

The prophet Muhammad (pbuh) said: "This is the source of the tradition of the Sa'y (rituals of the hajj, pilgrimage) the going of people between them (As-Safa and Al-Marwa). When she reached Al Marwa (for the last time) she heard a voice and she asked herself to be guiet and listened attentively. She heard the voice again and said: "O whoever you maybe! You have made me hear vour voice: have vou got something to help me?" And behold! She saw an angel at the place of Zam zam, digging the earth with his heel (or his wing) till water flowed from that place. She started to make something like a basin around it, using her hand in this way, and started filling her water skin with water with her hands and the water was flowing out water she had scooped some of it." "She lived in that way till some people from the tribe of Jurhum or a family from Jurhum passed by her and her child as they (the Jurhum people) were coming through the way of Kada. they landed in the lower part of Mecca where they saw a bird that had the habit of flying around water and not leaving it. they said: "this bird must be flying around water, though we know that there is no water in this valley." They sent one or two messengers who discovered the source of water and returned to inform them of the water. SO they all came towards the water. Isma'il's mother was sitting near the water. They asked her: "Do you allow us to stay with you?" She replied: "Yes, but you will have no right to possess the water." They agreed to that. Isma'il's mother was pleased with the whole situation, as she used to love to enjoy the company of the people, so they settled there, and later on they sent for their families who came and settled with them so that some families became permanent residents there. The child (Isma'il) grew up and learned Arabic from them and (his virtues) caused them to love and admire him as he grew up and when he reached the age of puberty they made him marry a woman from amongst them."

When the **Prophet Musa** (AS) had attained the age of a few months, his mother got made a very tight box. She put a blanket in the box. She lifted her affectionate son and kissed him again and again. She put him in the box with tears in her eyes. Her

heart was beating violently. She pushed the box into the water when it was still dark. The box moved slowly on the surface of the water. His sister watched the box at a distance but the mother went back home wailing and sobbing. She was full of anxiety due to the separation of her beloved baby.



[...] Prophet Musa (AS) meets his future wives at a well: "My father invites you so that he may give you the reward of your having watered for us." (28:24)

- [...] Prophet Musa (AS) parts the waters of the Red Sea by the will of Allaah. It is a miracle to reward the believing Jews.
- [...]One season came there was hardly any rain. It overtook the people with draughts and diminution of fruit. There was an acute shortage of water and food. The people began to die of starvation. The Prophet Musa (AS) prayed to Allah and He provided them with eatables. The Holy Qur'an states:

"And when Musa prayed for drink for his people, We said: Smite with your staff the rock, and there gushed out therefrom twelve springs so that each tribe knew their drinking place: Eat and drink of that which Allah has provided and do not act corruptly making mischief in the earth." (2: 60)

Almighty Allah narrated the story of **Prophet Nuh** (AS): "So it was till then there came Our Command and the oven gushed forth (water like fountains from the earth). We said: 'Embark therein, of each kind two (male and female), and your family, except him against whom the Word has already gone forth, and those who believe." And none believed him except a few." (11:40 Quran)

Water rose from the cracks in the earth; rain poured from the sky in quantities never seen before on earth. Water continued pouring from the sky rising from the cracks; hour after hour the level rose. The seas and waves invaded the land. The interior of the earth moved in a strange way, and the ocean floors lifted suddenly, flooding the dry land. The earth, for the first time was submerged. (read more in verses 11:41-48 Quran)

**Prophet Suleiman** (AS) and his people went on pilgrimage to the Holy Mosque in Makkah. After they had completed their *hajj*, they traveled to Yemen and arrived in the city of Sana. Solomon was impressed by their clever method of channeling water all over their cities. He was keen to build similar water systems in his own country but did not have enough springs.

He set out to find the hoopoe bird, which could detect water under the ground. "

'True, and water is discussed literally hundreds of times in the *hadith*, the documented sayings and actions of the Prophet Muhammad. Water conservation was explicitly encouraged by the Prophet Muhammad, peace be upon him, especially while washing even when taken from a large river.



By means of water, we give life to everything.
- Koran. 21:30

Imagine, water is so precious, it is considered a fundamental human right. This is so that the caliph Uthman (RU) bought a well exclusively for the Muslims in Madinah, and it was free for all. The first priority is to quench the thirst of humans, the second one the animals, and in third the crops.

Islamic law sets punishments for those who do harm by polluting the water.'

'Wow! That means a lot to me. I do not want to get sick ever again but I know, because of pollution, it is bond to happen again. Do you know, Sun, that there are some 350 chemicals in tap water, "including pesticides and nitrates leaching through the soil, hazardous contaminants from disposal landfills, chemical effluents and toxic wastes which pollute rivers, additives like aluminium sulphate and disinfectants like chlorine at the water treatment works, which create further toxic chemicals as by-product of disinfecting, lead from leaky pipework and, increasingly, parasites, not to mention fluoride. Instead, drink mineral water (from glass bottles), or install a reverse osmosis filter or under sink carbon filter" (Natural Parent, November 1997 or WDDTY vol 3 no 12).

"Fluoride is another major intellect suppressant that is being added to drinking water supplies and toothpaste. Sodium fluoride is a common ingredient in rat and cockroach poisons, anaesthetics, hypnotics, psychiatric drugs, and military nerve gas."

(David Icke, Children of the Matrix)



#### **CONSERVING SOME WATER:**

To stay healthy each person needs about 55 gallons of water each day to clean, cook and drink

Some people do not get even that while other people consume ten times this amount everyday.

The average person in the United States uses 80 to 100 gallons of water each day. During medieval times a person used only 5 gallons per day.

If everyone in the US used just one less gallon of water per shower every day, we could save some 85 billion gallons of water per year.

If everyone in the US flushed the toilet just one less time per day, we could save a lake full of water about one mile long, one mile wide and four feet deep.

Half of the water we use during the Summer is used to water plants. Sprinkling lawns could save a lot of water. See how much ,at:

http://interapp.sannet.gov/landcalc/Landscape

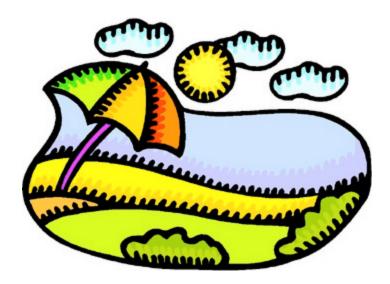
So, deep soak your grass less frequently.

Every glass of water brought to your table in a restaurant requires another two glasses of water to wash and rinse the glass. Since nearly 70 million meals are served each day in US restaurants, we'd save more than 26 million gallons of water if only one person in four declined the complimentary glassful.

An averaged-size pool with average sun and wind exposure loses approximately 1,000 gallons of water per month. A pool cover cuts the loss by 90%. Getting a cover for your pool can help prevent evaporation.

# References:

- (1) "Who, Where, When and Water Conservation Questions & Answers" originally published by the City of San Diego Water Department, Water Conservation Program, San Diego, California.
- (2) "55 Facts, Figures & Follies of Water Conservation," published by the American Water Works Association (AWWA).



Rest is not idleness, and to lie sometimes on the grass on a summer day listening to the murmur of water, or watching the clouds float across the sky, is hardly a waste of time.

- Sir John Lubbock



#### **HOW MANY?**

How many baths can you get from a rainstorm?

In twenty minutes, one thunderstorm can send down over 125,000,000 gallons of water!

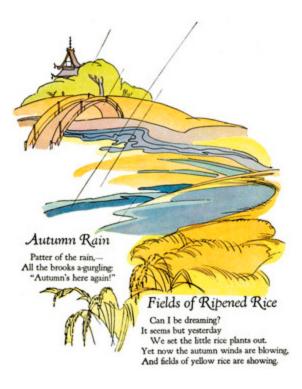
About 1 billion gallons of potable water are used in each state each day. It takes 2 gallons to brush your teeth, 2 to 7 gallons to flush a toilet, and 25 to 50 gallons to take a shower.

1 inch of rain on 1 acre makes up 27,154 gallons of water. That's enough to fill a city bus!

There are over one million miles of water pipelines and aqueducts in the United States and Canada. That's enough to circle the globe 40 times.

"I have never seen a river that I could not love. Moving water...has a fascinating vitality. It has power and grace and associations. It has a thousand colors and a thousand shapes, yet it follows laws so definite that the tiniest streamlet is an exact replica of a great river."

Roderick Haig-Brown



No one can see their reflection in running water. It is only in still water that we can see.

- Taoist proverb



The many-voiced song of the river echoed softly.
Siddhartha looked into the river and saw many pictures in the flowing water. The river's voice was sorrowful. It sang with yearning and sadness, flowing towards its goal ...

Siddhartha was now listening intently... to this song of a thousand voices ... then the great song of a thousand voices consisted of one word:

Om -- Perfection ...

From that hour Siddhartha ceased to fight against his destiny
- Hermann Hesse, Siddhartha

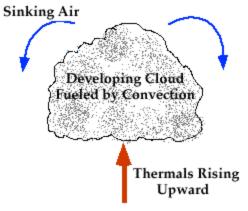
# The Creation of Clouds

(Images/Text/Data from the University of Illinois WW2010 Project. http://ww2010.atmos.uiuc.edu/)

The upward motions that generate clouds can be produced by convection in unstable air, convergence associated with cyclones, lifting of air by fronts and lifting over elevated topography such as mountains.

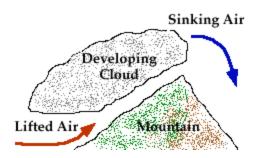
#### Convection

As the surface warms, it heats the overlying air, which gradually becomes less dense than the surrounding air and begins to rise.



# **Topography**

When air encounters a mountain range, it is forced to rise up and over the mountains and if enough lifting occurs, water vapor condenses to produce clouds.

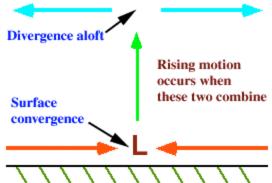


A simple demonstration of condensation through convection can be performed by placing a pot of water on a heated stove. The burner represents the heating of the earth's surface by the sun, while the water and the air above it represent the atmosphere. As the bottom of the pot (earth's surface) begins to heat the water (lower atmosphere), warmer and less dense water evaporates and rises (thermal) into the drier, colder air above the pot (middle atmosphere). This causes the

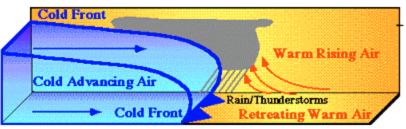
thermals to cool and water vapor within to condense, forming a small cloud, or steam, that is visible above the pot of heated water.

## **Convergence Associated With Cyclones**

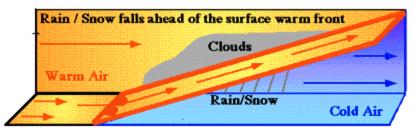
Surface winds lifted up, cooling the air and creating heavy clouds.



#### **Fronts**



In the case of a cold front, a colder, denser air mass lifts the warm, moist air ahead of it. As the air rises, it cools and its moisture condenses to produce clouds and precipitation.



In the case of a warm front, the warm, less dense air rises up and over the colder air ahead of the front. Again, the air cools as it rises and its moisture condenses to produce clouds and precipitation.

#### Islam

'I have been thinking, sun. All the fresh water we find on earth is of salty origin, as it comes from sea water, which covers three-quarters of the surface of the earth. From this salt water, Allaah distills the fresh water that all living creatures need.

You Sun evaporates the water in the ocean and the vapor is carried by the winds through the atmosphere where it is condensed into clouds when it touches the cooler upper atmosphere, way above. Winds then carry the clouds to wherever Allah wishes rain to fall.

"It is He who sends down water upon you from heaven with which to purify you" (8:11).

"We have sent down from the sky purifying water" (25:48).

Part of the water evaporates, another part seeps away into the soil and the rest returns to the sea. From the sea, up to the air and back to earth, water is constantly filtered and purified. *Masha Allaah*. Isn't this amazing?'

'Allah said:

"Surely in the creation of Heaven and Earth and the alternation of night and day, and in the ships which plough the sea carrying what is of benefit to mankind, and in the water which God sends down from the sky with which to revive the earth after it has been dead and to scatter every kind of animal throughout it, and in directing the winds and clouds which are driven along between the sky and the earth, there are signs for people who use their reason" (2:164)." I went down the porous soil a few times. My companions and I were falling and falling deep inside the earth when suddenly we met an impermeable layer, i.e. one through which we could not pass, so we knew we could not reach the fire inside the earth that Islam calls the Hellfire.

Afterwards we formed a lake underground until we found an upward outlet by the side of a valley, gushing out in the form of a spring or fountain-head, or we found a downward path, penetrating deeper below the first impermeable layer in the ground, until we reached another, non-porous layer, over which we gathered. All along the way we were purified through the pores of the soil and rock, becoming as clear as crystal.

The Noble Qur'aan talks about this process. Amazing that the men could know that 15 centuries ago!

"Do you not see how God sends down water from the sky and causes it to penetrate into the earth where it gathers into springs" (39:21). "There are some stones from which rivers gush out and there are others which split open and water comes out from them" (2:74).



Ancient traditions have long associated holy wells and springs as very special places of the Goddess or *anima mundi*:

symbolic of the Great Mother and associated with birth, the feminine principle, the universal womb, the *prima materia*, the waters of fertility and refreshment and the fountain of life.

The *dreaming sites*, as they are called, have also been associated with visions, healing, and other paranormal experiences.

In ancient Greece, for example, there were more than three-hundred medical centers placed at water sources, where patients experienced healing.

- Christopher and Tricia McDowell, The Sanctuary Garden, 1998, p. 62

I also remember been very scared to end up in a pond. Ugh! Stagnant water is filthy and full of parasites and diseases. Ugh! The Prophet PBUH mentions our ordeal when arrived in there: "Let no one of you bathe in stagnant water to remove the state of ceremonial impurity" (related by Muslim).

"Guard against the three practices which invite people's curses: evacuating one's bowels near water sources, by the roadside and in the shade" (related by Abu Dawood).'

'Sure, Dew, urinating in stagnant water causes the spread of diseases. And it is in the shade that people rest, and shady places do not receive enough sunshine to kill the germs that grow in humid places. Water can transport many illnesses, so much that even in the desert, someone has to filtrate water to avoid diphtheria and I do not know how many other diseases.



"The mark of a successful man is one that has spent an entire day on the bank of a river without feeling guilty about it." Chinese Philosopher

Fortunately in Islam the prohibition of urination and defecation in water may be extended to all water pollutants such as the disposal of industrial effluent, dead animals, rubbish and waste, as well as the washing contaminated clothes in rivers, canals and drains, and any action that pollutes the environment and endangers animals and plants.

Allaah orders: "Do not corrupt the earth after it has been set in order" (7:85)."

True. Islam's concern for maintaining the purity of water shows in everyday life in the most simple code of manner of the Muslim. Listen: Prophet PBUH: "Anyone who wakes up from sleep must not put his hand in any utensil until he has washed it three times; for he does not know where his hand was during his sleep" (related by Muslim).

The Prophet PBUH also warned against leaving food and drink containers uncovered. Aisha, the Prophet's PBUH wife, said: "I used to prepare for the Prophet PBUH at night three covered water containers: one for his ablutions, another for brushing his teeth and the third for drinking".

In another hadith related by Ibn Majah on the authority of Jabir, we are told that "the Prophet PBUH has commanded us to tie up the mouths of our water skins and to cover our containers". The purpose of this is to prevent harmful insects from getting into food and drink, thereby transmitting disease-causing germs. This is a highly effective means of disease prevention.

Islam requires Muslims to make ablution and bath, to wash one's hands before and after meals, and to wash clothes to purify them when they are in contact with body fluids. Washing is actually considered and act of worship. And we are the ones that permit this worship! Pretty amazing, don't you think, Sun?'

'Not even I, without whom the earth would be covered with dark forever, have been that much honored!'

'Yes, and you know that? "Purification is one half of faith" (related by Muslim).

When humans perform ablution they wash their faces, hands and arms, which are the parts exposed to dust and contamination as well as the feet who can breed germs. That makes sense. The Prophet PBUH also said: "Ablution is the opening of prayer" (related by Abu Dawood). Without us, no prayer!'

'There is enough here for you to be proud, Dew.'

# 'Indeed.

Statement by the Prophet PBUH: "When a Muslim of God's servants makes his ablution and rinses his mouth, sins come out of it, and so do they come out of his nose when he rinses it. When he washes his face, sins drop from all of his face including from behind the edges of his eyelids. When he washes his hands, sins drop from all over his hands, including from under his fingernails. When he wipes his head, they drop from his head and from under his ears. When he finally washes his feet, sins drop from them to the extent that they go out from under his toenails" (related by Muslim).

According to a hadith related by Al-Tirmithi "the Prophet PBUH used to perform ablution for every prayer". Although he has not made this obligatory to his followers he has encouraged them to do likewise. He said: "Only a believer maintains his state of purification by ablution"(related by Al-Darime). He also said: "A person who performs ablution even though he has not invalidated his earlier one receives from God the reward of ten good deeds" (related by Al-Tirmithi).

A believer is encouraged to perform ablution if he wants to eat or sleep. The Prophet PBUH was asked whether a person in a state of ceremonial impurity may sleep, eat or drink. He answered: "Yes, if he performs ablution in the same manner as when he wants to pray" (related by Ibn Majah).

Islam also requires a man who has had sexual intercourse with his wife and wants to do so again to perform ablution in the interval. According to an authentic hadith: "If any of you has had intercourse with his wife, and wants to repeat it, he should perform ablution" (related by Muslim).

Muslims are also recommended to perform ablution before they go to bed.

Ablution is further recommended when one is in a state of anger or has touched or carried a dead person, and before reciting the Qur'an or for attending Islamic lessons, entering a mosque, calling for prayer, giving a sermon or visiting a graveyard or for no reason at all.

"A man performed his ablution, leaving a spot as big as a nail on his foot without being washed. Seeing him, the Prophet PBUH instructed him to go back and perfect his ablution" (related by Muslim).



Water is the only drink for a wise man.
- Henry David Thoreau
Like swift water, an active mind never stagnates.

The Prophet PBUH said: "It is a duty owed to Allaah by every Muslim to take a bath once every seven days, washing one's head and body" (related by Muslim), preferable on Fridays.

Cleanliness and self-purification are associated with worship on the one hand and with social activity on the other. The Prophet PBUH encouraged "taking a bath on the day of the feast ending the fast and on the day of the feast of sacrifice" (related by Ibn Majah). It is reported by Ibn Abbas that Allaah's messenger "took a bath and put on his clothes. When he arrived at Thul-Hulaifa (one of the points where pilgrims must wear their consecration garments) he offered two rak'a of prayer before mounting his camel. when the camel rose up to start its journey, the Prophet PBUH entered into the state of ihram, or consecration, for pilgrimage" (related by Al-Bukhari and Muslim)."



In Scandinavian mythology, for example, the fountain of Mimir, source of hidden wisdom, lay under the roots of the great world tree

and in Islamic culture fountains are found referred to in the Koran, in the garden called Paradise.

# In the Bible the passage:

"It is done, I am Alpha and Omega, the beginning and the end.

I will give unto him that is athirst of the fountain of the water
of life freely," reflects the importance that fountains
symbolized to the writers.

- Bryan R. Hirst, Fountains



"It is assuredly not in the nature of water to flow
to the east or to the west, but can one say that it is not in
the nature of water to flow upwards or downwards?
Man's nature is inherently good, just as it is the
nature of water to flow downwards.
As there is no water that flows upwards, so there are no men
whose natures inherently are bad.
Now you may strike forcefully upon water,
and it will splash above your head.
With a series of dams, you may force it uphill.
But this is surely nothing to do with the nature of water;
it happens only after the intrusion of some exterior force.
A man can be made to do evil, but this is nothing to do with his nature.
It happens only after the intrusion of some exterior force."

Confucianism - [Mencius 6A.2 - W. Dobson translation]

# Religions & water:

'You know, Dew, water plays a central role in many religions and beliefs around the world. Source of life, it represents (re)birth, purification and it is sacred in many cultures.

Water is a key element in ceremonies and religious rites.



Let yourself be open and life will be easier. A spoon of salt in a glass of water makes the water undrinkable. A spoon of salt in a lake is almost unnoticed. –

Buddha

It is a pious act to make ponds, wells and water canals. That is why people in the past built them. People get thirsty while working in the field, and it was difficult to immediately get water when required. That is why when people located a natural water source in the field, they got together and dug a well.

Isn't it a godly act to make water available to the thirsty?"

Satya Lal, M/92, Nepal 19

**Buddhists** use water in funerals: it is poured to overflowing into a bowl placed before the monks and the dead body. As it fills and pours over the edge, the monks recite "As the rains fill the rivers and overflow into the ocean, so likewise may what is given here reach the departed." Travelers to Tibet reported seeing pilgrims seated by the side of streams stamping the waters with metal tsatsa molds, impressing into the flowing waters sacred forms for the benefit of all beings coming in contact with such waters.

**Christians** sprinkle a few drops of water or immerse in water those who want to be baptized, that is those who publicly declare their faith.

The Gospel says that Jesus was baptized by John the Baptist in the River Jordan.

This ritual symbolizes purification, the rejection of original sin. In the New Testament, the 'living water' or 'water of life' represents the spirit of God, that is, eternal life. A Holy water is blessed for use in certain rites. This use of water goes back to the 4th century in the East and the 5th century in the West. The custom of sprinkling people with water at mass or sprinkling oneself while entering the church began in the 9th century. Holy water is now used at blessings, dedications, exorcisms and burials.

The Church and the Healing Waters of the Grotto of the Blessed Lady of Lourdes, in France, attract five million visitors each year.



"A mirror reflects a man's face, but what he is really like is shown by the kind of friends he chooses."

- Proverbs 27:19

NB: Brendan Johnston notes that this passage usually reads:
"As water reflects a face, so a man's heart reflects the man."

**Hindus** clean themselves with water every morning. All temples are located near a water source where the followers bath before

entering them. Sites where two, or even three, rivers converge are considered particularly sacred so many people do their pilgrimage there.

There are seven sacred rivers in Hindouism; the Ganges is the most important. Those who bathe in it

And leave some hair, body parts or the bones as dead will reach one of the paradise. The river is said to flow from the toe of Vishnu to be spread into the world through the hair of Shiva.

Physical purification can be very elaborate in the case of *sadhus*, the Hindous monks.

If someone drinks from the same vessel as a member of a lower caste, they must purify themselves.

The son of the deceased pours water on the burning funeral pyre so that the soul cannot escape and return to Earth as a ghost. The myth of the Great Flood is contained in some Hindu scriptures, and tells the tale of how Manu, the first man, was rescued from the flood by a fish (the god Brahma).

**Jews** use water to ritually purify themselves. To wash hands before and after meals is obligatory.

Men attend ritual baths, or mikveh, to convert, on Fridays and before large celebrations, women before their wedding, after giving birth and after menstruation. The Red Sea is significant in Jewish history because G-d permitted the Prophet Moses to part it so his people could flee from Egypt. Water here is an instrument of G-d for punishment and a reward for the Israelites.

Many waters cannot quench love, neither can floods drown it.
SONG OF SONGS- Zen

Every culture has its own version of a Great Flood; many of these tales contained similarities:

Humans are guilty of transgression.

A God sends a flood as punishment.

Instructions are sent to an individual to build a craft.

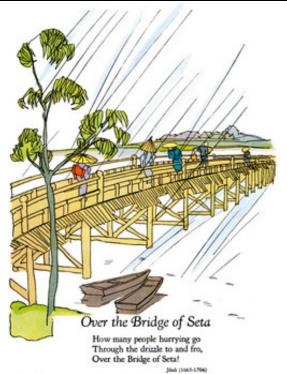
The instructions include ensuring the survival of all species.

The flood destroys the old race.

After the flood, a new, less sinful race emerges to repopulate the earth.

To read more, go to:

http://www.dreamscape.com/morgana/titania.htm

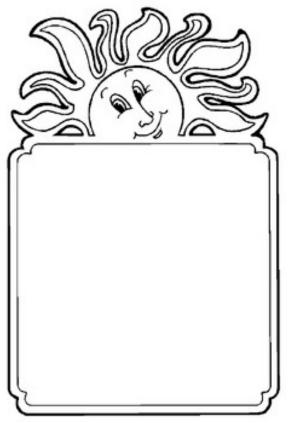


**Shintos** in Japan is an animist religion. Worship always begin by a ritual of purification with water. Waterfalls are considered sacred in Shinto.

**Zoroastrians** believe that when the world was created, the Evil Spirit attacked the Earth and turned some of its water salty. It is forbidden to spit, urinate or wash one's hands in rivers because clear water is sacred while soiled water is evil. They must perform ritual ablutions before saying their 5 daily prayers and before any religious ceremonies such as weddings. To conserve the purity of water, fire and earth, the dead cannot be immersed, cremated or buried.

**Bahá'ís** have laws concerning water and cleanliness, and many ways that water is used so that the ecological balance is maintained. Water is a fundamental resource for one of the pillars of their religion: agriculture.'

'How interesting.' She yawns. 'Now, I'd rather have some more company, sleep and wake up in midair in a fluffy cloud where my people are awaiting to fall. I'd rather dream of our conversation near the stars. Fly me high in the sky, now, Sun, fly me high so that the winds can fly me farther like kites in the sky. I wish to see more of all this beautiful world that Allaah created so perfectly. And up for another cycle."



Keeping in touch with childhood memories keeps us believing in life's simplest pleasures like a rainy afternoon, a swingset, and a giant puddle to play in.

- Chrissy Ogden

All feelings, both positive and unpleasant, come out of the same faucet.

To turn down the faucet on pain is to slow
the flow of pleasant feelings as well.

- Gay and Kathlyn Hendricks



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