



MANZI'S NEWS



A Newsletter for Manzi's Water Wise Club Members

October 2016

Planet Earth & Beyond

Hi Friends,

I am very excited to talk to you again! I hope you are all looking forward to this month's newsletter. In this issue we are going to look at planet Earth & beyond. Earth, the only planet in the solar system known to support life, is a beautiful planet consisting of salt water, land, fresh water and air. From space, the oceans look blue, land looks brown and green, and cloud cover looks white. The Earth features a variety of landforms and landscapes, where a variety of life uses them in order to live. Over two million different forms of life have been identified on planet Earth to this day, but scientists believe there are millions more that have yet to be identified. Planet Earth, like Mercury and Venus, features mountain ranges, canyons, ridges, plains and regions of volcanic activity. What makes Earth different to other planets is water - the key to life. All the waters on the Earth's surface is known as its hydrosphere.



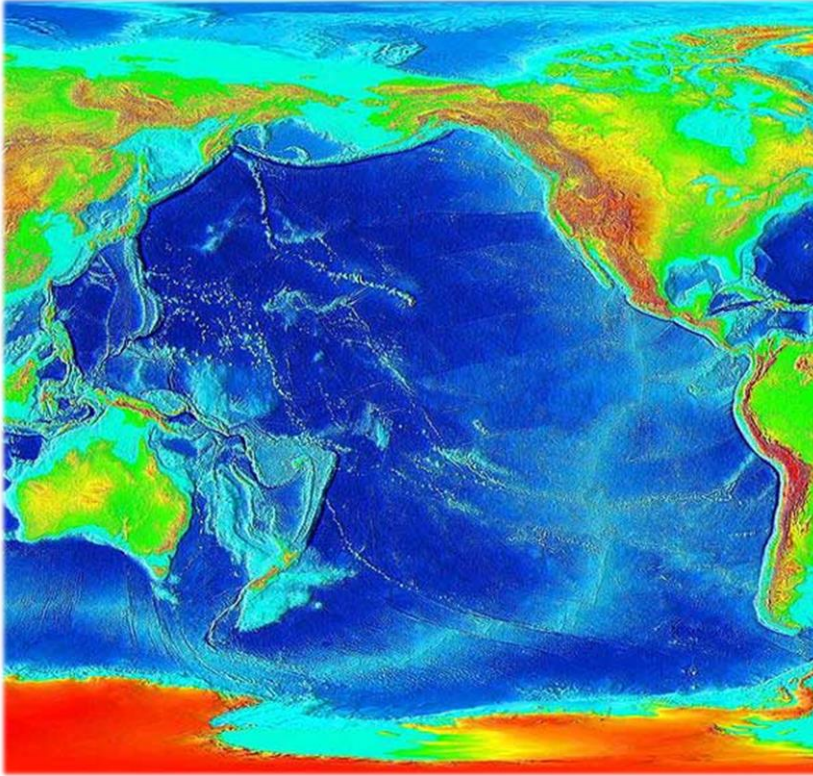
Credit: www.sciencekids.co.nz

Land

The Earth is made up of a rock. The total surface area of the Earth is about 510 million km². Land covers 30% of the Earth and consists of continents, dry land, snow and mountains. Millions of years ago there was only one large land mass and a large ocean surrounding it. Later on the land mass started to split and drift apart with the ocean surrounding different pieces of land. This process is still going on. There are 7 continents on Earth namely Africa, Antarctica, Asia (being the largest), Australia, Europe, North America and South America. The highest point on land is Mount Everest and the lowest is the Dead Sea.

Water

Water is an essential chemical that supports life on Earth. Water has three different states, i.e. liquid, solid and gas. It covers 70% percent of the Earth surface. Water is found in rivers, lakes, man-made dams, oceans and underground.



The Pacific Ocean is the largest of the world's five oceans, followed by the Atlantic Ocean, Indian Ocean, Southern Ocean, and Arctic Ocean. Approximately 97% of all water is found in the ocean. The seawater contains a large amount of salt dissolved in the water, which means that it cannot be used as it is. Only the remaining 3% is fresh water. Of this 3%, less than 1% is available for life on Earth, whilst the rest is in the form of ice at the poles, within the Earth's crust as groundwater, and in the atmosphere as water vapour.

Credit: www.sciencekids.co.nz

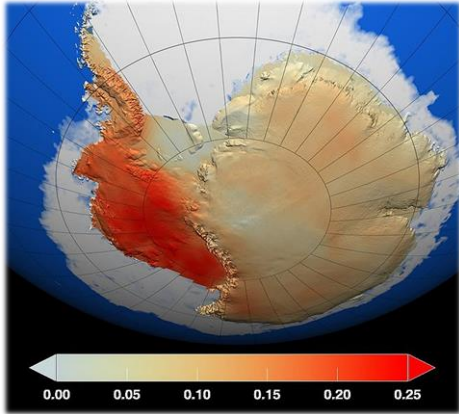
The longest river in the world is the Nile River, which reaches 6650 kilometres in length. The second longest river in the world is the Amazon River, which reaches 6400 kilometres. The water that we have on Earth is very old. The same water that is used presently was used by the dinosaurs millions of years ago. This is because the Earth recycles its water, i.e. it re-uses the water. This recycling of water is called the water cycle.



Credit: ©Jurie Maree

Air

The atmosphere of the Earth is 78% nitrogen, 21% oxygen and trace amounts of water vapour and carbon dioxide. Oxygen is only found on the Earth and is produced by the planet's plants. As more and more oxygen was produced by plants long ago it resulted in the formation of the ozone layer. This layer protects the planet from most of the sun's harmful ultra-violet rays. This, together with the greenhouse effect (where the planet captures and re-radiates energy) allowed conditions for life to begin.



Credit: www.sciencekids.co.nz

Temperatures on Earth are different according to where you are on Earth. The Sun is the source of energy on the planet. The coldest temperature ever recorded on Earth was -89.2 degree Celsius in Antarctica. The hottest temperature ever recorded was 57.1 degree Celsius at Al' Aziziyah, Libya. Human beings are thought to be responsible for the Earth's increasing surface temperatures, a phenomenon known as global warming.

The Earth is a very special place as it has life. We all need to look after it. It is in our hands. If we look after the land, water and air then we will look after the life living on Earth. It is very important that we all be Water Wise.

Lots of Love

Manzi



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