WELCOME DEAR STUDENTS OF CLASS VI SESSION 2020 - 2021

PREPARED BY,
T.JAYANTHI,
TGT, SCIENCE,
AECS – 2, KALPAKKAM

SCIENCE SKILLS ARE LIFE SKILLS. SCIENCE REVEALS TRUTH. EMBRACE SCIENCE AND RESIST IGNORANCE.

CHAPTER – 14 WATER – MODULE 1



WATER











WHAT IS WATER?

- A SUBSTANCE COMPOSED OF TWO ELEMENTS HYDROGEN AND OXYGEN.
- FORMS THE BASIC BUILDING BLOCK OF ALL LIFE ON EARTH.
- MOST PLENTIFUL NATURAL RESOURCE ON OUR EARTH.

ABUNDANCE OF WATER ON EARTH



PROPERTIES OF WATER

- COLOURLESS
- ODOURLESS
- TASTELESS
- CAN TAKE THE SHAPE OF ANY CONTAINER
- EXISTS IN ALL THE THREE FORMS NAMELY SOLID LIQUID AND GAS

PROPERTIES OF WATER





WHY DO WE REQUIRE WATER?

EVERY DAY ACTIVITIES REQUIRE WATER

- DRINKING
- BRUSHING
- TAKING BATH
- WASHING UTENSILS
- WASHING CLOTHES
- CLEANING FLOORS
- WASHING VEHICLES
- HYGENIC PURPOSES

EVERYDAY REQUIREMENTS OF WATER

















DOES WATER HAVE OTHER REQUIREMENTS?

- ALL CROP PLANTS WHERE WE GET OUR FOOD FROM LIKE CEREALS PULSES VEGETABLES AND FRUITS REQUIRE WATER
- PLANTS WHICH GIVE FIBRES LIKE COTTON AND JUTE NEED WATER
- ALL INDUSTRIES AND FACTORIES REQUIRE WATER FOR PRODUCTION OF ALL THINGS

OTHER REQUIREMENTS OF WATER















IMPORTANCE OF WATER IN OUR BODY

- DISSOLVES A LARGE NUMBER OF SUBSTANCES
- ESSENTIAL FOR DIGESTION, ABSORPTION OF NUTRIENTS AND EXCRETION
- USEFUL TO REGULATE THE BODY TEMPERATURE.

SOURCES OF WATER

- LAKES
- PONDS
- RIVERS
- WELLS









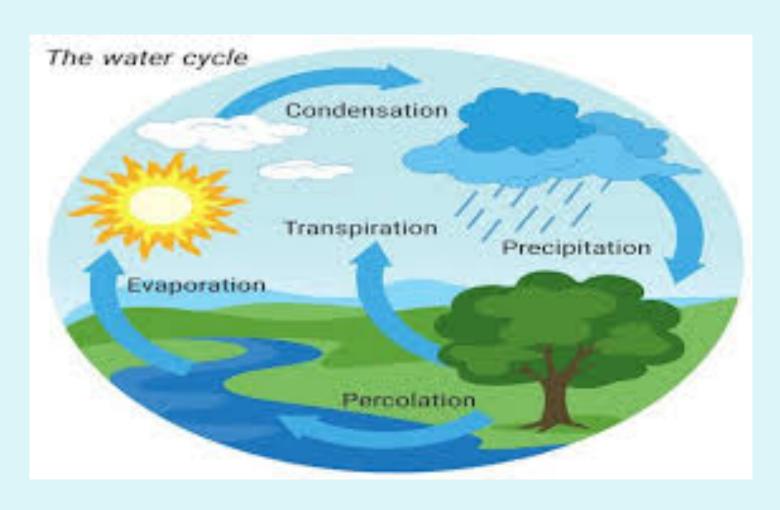
OCEANS

- TWO THIRDS COVERED WITH OCEANS.
- IS NOT USABLE WATER
- UNFIT FOR DRINKING
- CONTAINS LOTS OF SALT DISSSOLVED IN IT.
- PLAYS AN IMPORTANT ROLE IN SUPPLYING THE WATER WE USE THROUGH WATER CYCLE





WATER CYCLE



WATER CYCLE

IT CONSISTS OF FOUR STEPS

- EVAPORATION
- CONDENSATION
- PRECIPITATION
- INFILTRATION

EVAPORATION

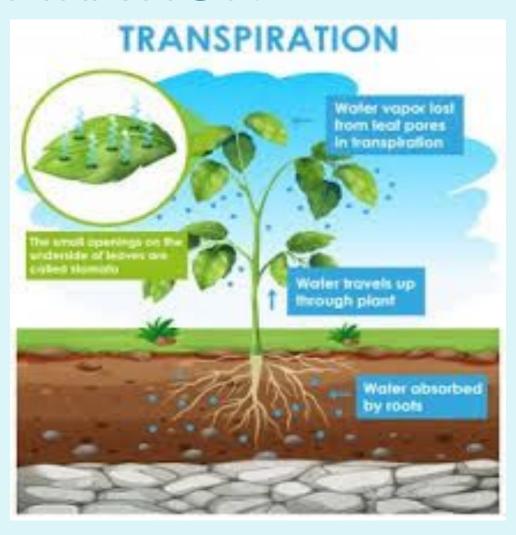
ACTIVITY

- TAKE TWO PLATES AND POUR EQUAL AMOUNT OF WATER IN IT
- KEEP ONE IN DIRECT SUNLIGHT AND OTHER IN SHADE
- OBSERVE AFTER EVERY 15 TO 20 MINUTES.
- WHAT DID YOU SEE?

EVAPORATION

- CHANGING OF WATER INTO WATER VAPOUR IS CALLED EVAPORATION
- WATER IN OCEANS, RIVERS LAKES AND PONDS EVAPORATE QUICKLY DUE TO SUNLIGHT FALLING DIRECTLY ON THEM.
- WATER IN OTHER PLACES WITHOUT DIRECT SUNLIGHT ALSO TURN TO VAPOUR BUT AT A SLOWER RATE.

TRANSPIRATION



CONDENSATION

ACTIVITY

- TAKE A GLASS FILLED WITH WATER
- ADD SOME ICE CUBES TO IT
- WHAT DO YOU SEE ON THE OUTSIDE OF THE GLASS?
- WATER DROPS BEGIN TO APPEAR ON THE OUTER SURFACE OF THE GLASS.

FORMATION OF CLOUDS

- AT HIGH ALTITUDES TEMPERATURE BECOMES COOL
- AT SUCH GREAT HEIGHTS WATER VAPOUR CONDENSES TO FORM TINY WATER DROPLETS CALLED CLOUDS

THEY REMAIN FLOATING IN AIR AND APPEAR TO

US AS CLOUDS.

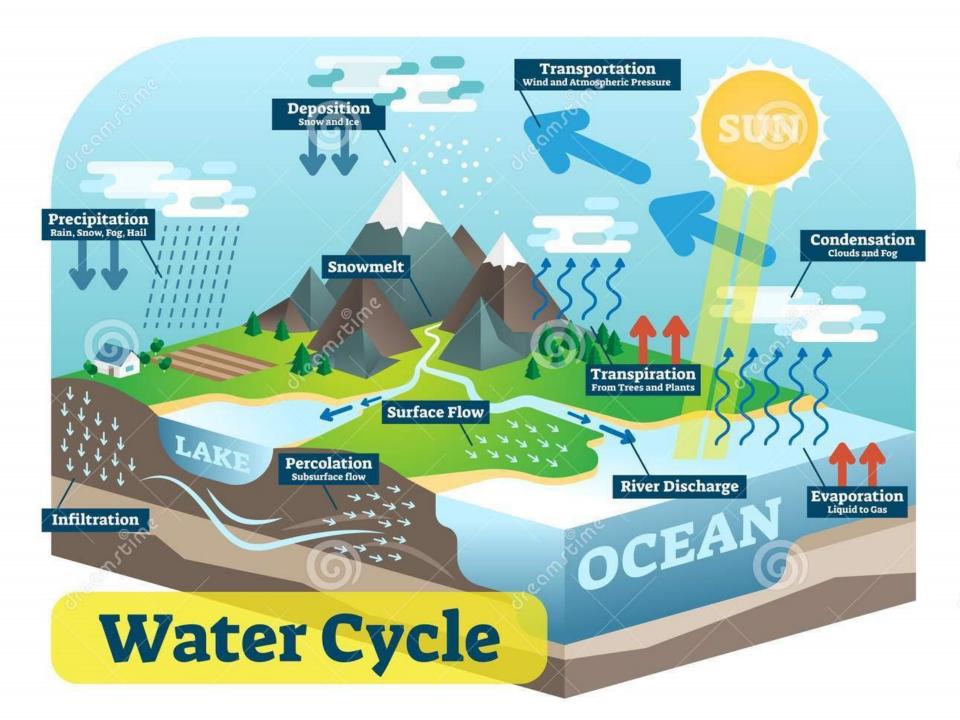


PRECIPITATION

- MANY DROPLETS OF WATER COME TOGETHER TO FORM LARGE DROPS OF WATER
- THEY BECOME HEAVY AND HENCE CANNOT FLOAT.
- THEY FALL DOWN FROM THE CLOUD
- THESE FALLING WATER DROPLETS ARE CALLED RAIN
- UNDER SPECIAL CONDITIONS IT MAY FALL AS SNOW, HAIL OR SLEET.

INFILTRATION

- MOST OF RAIN WATER GOES BACK TO OCEANS.
- SNOW FALLING ON MOUNTAINS MELT AND FORM RIVERS WHICH FINALLY JOIN THE OCEANS.
- RAIN WATER FILLS UP LAKES AND PONDS.
- REMAINING WATER SEEPS INTO THE GROUND.
 THIS IS CALLED INFILTRATION OR
 PERCOLATION.
- THIS IS CALLED GROUND WATER AND CAN BE USED THROUGH A WELL, HANDPUMP ETC.



THANK YOU CHILDREN.

STAY HOME. STAY SAFE.