

K.D.K.V.M.,RENUKOOT

School Club Activity (2025–26)

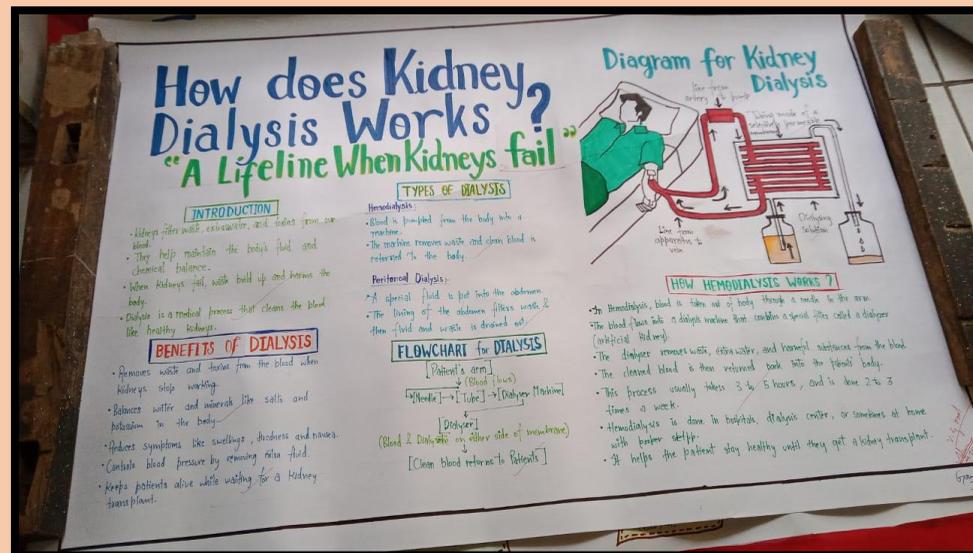
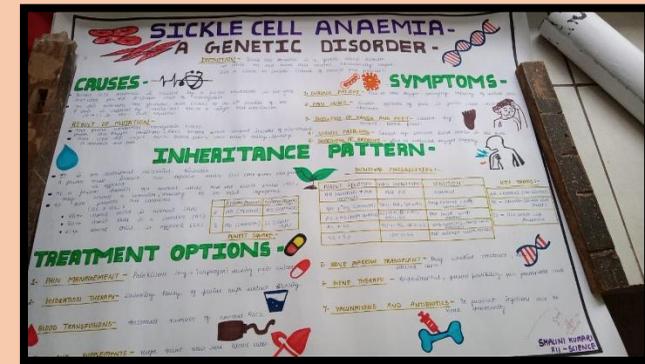
Clubs

Science
Club

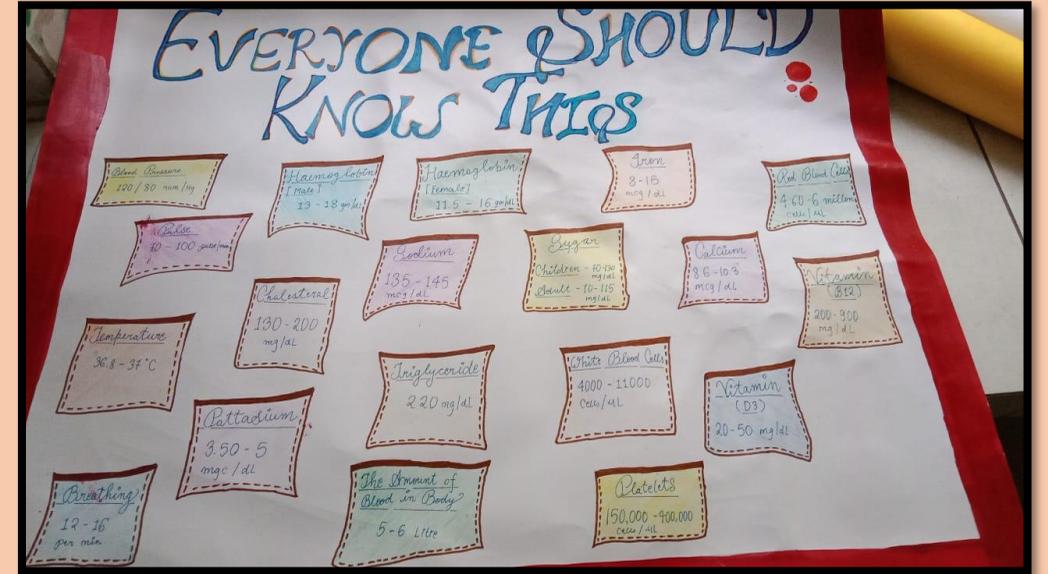
Images



Science Club



Science Club



Science Club



Garden Club

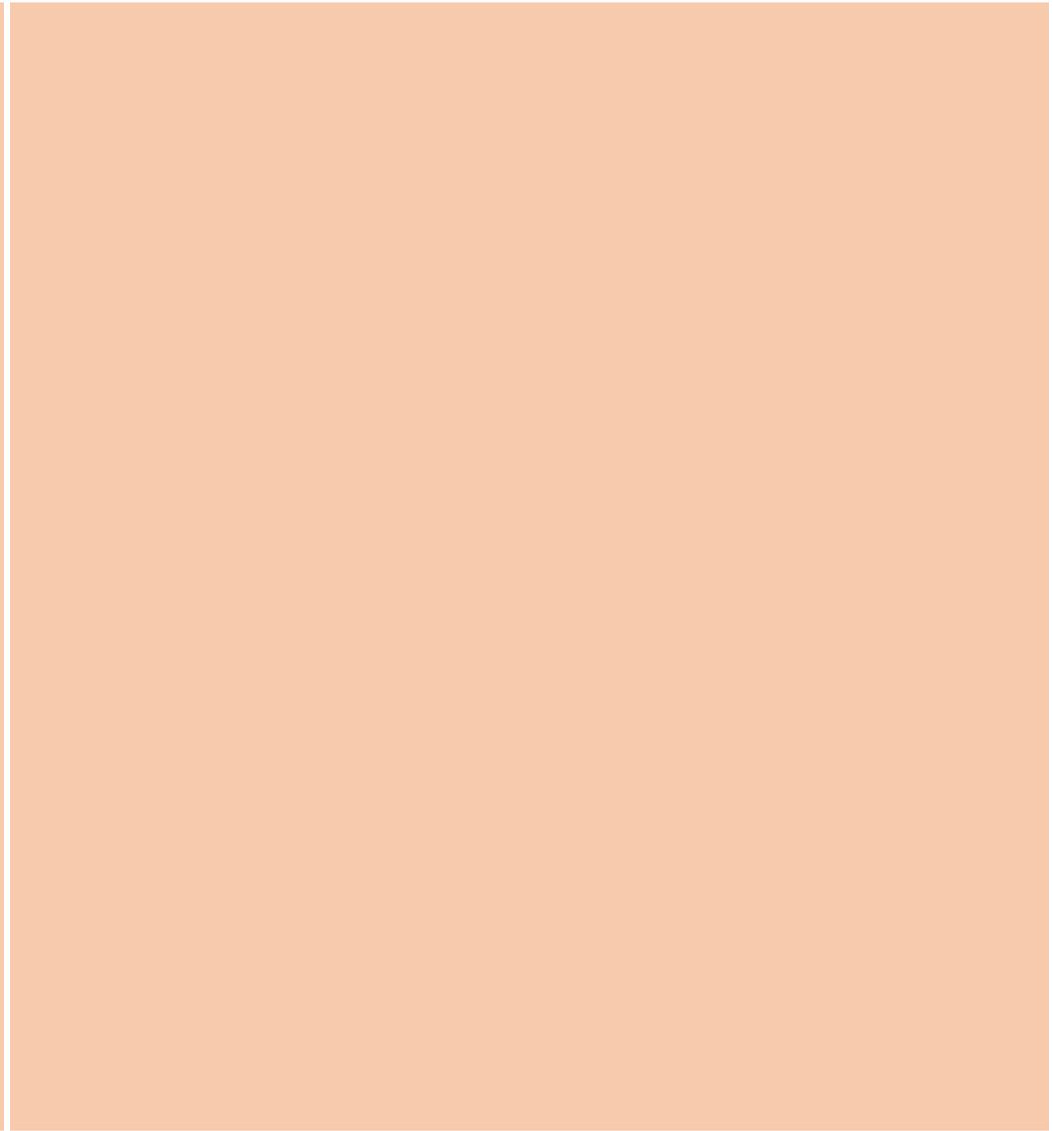
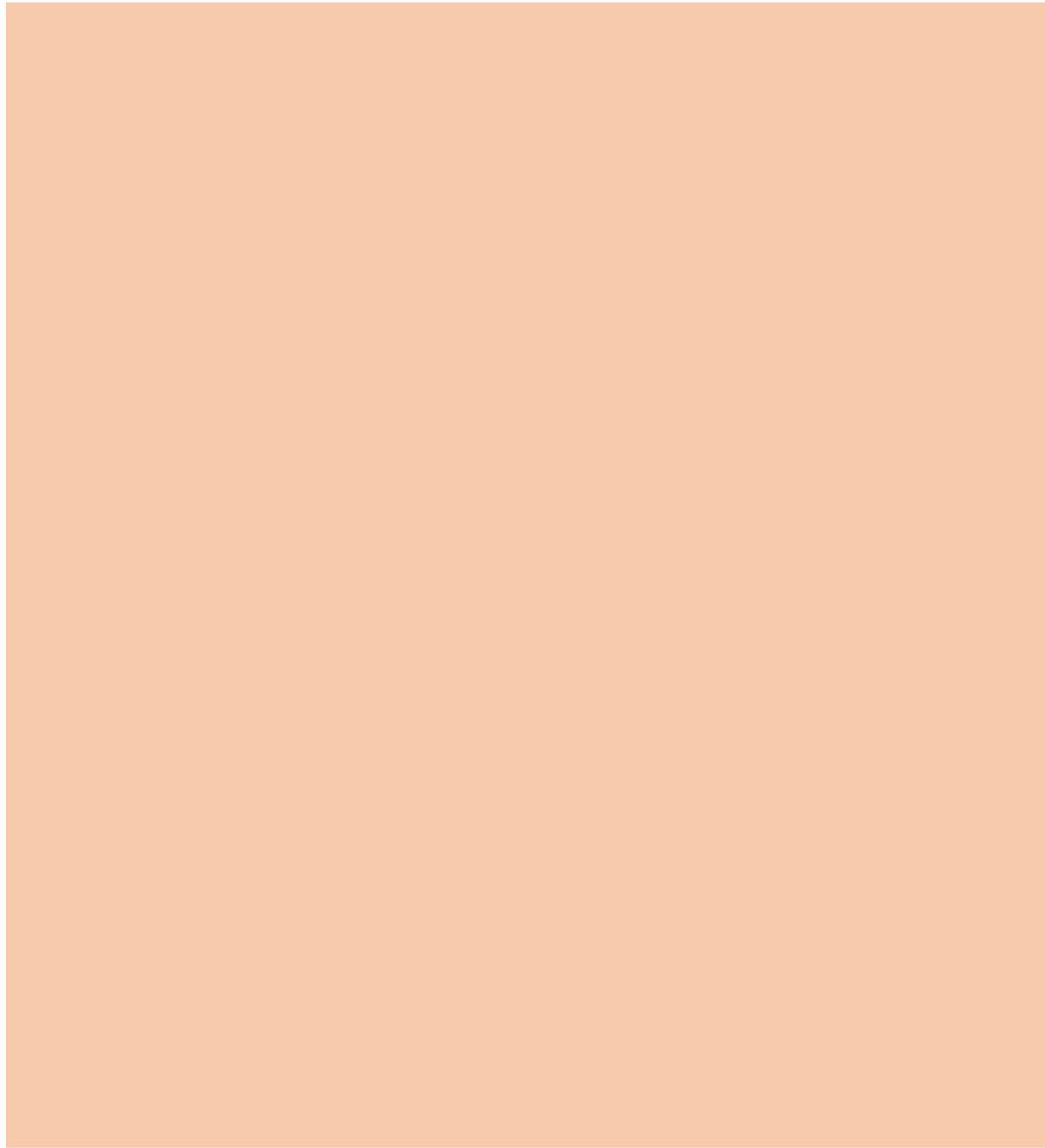


Yoga & Indoor games and sports club



Yoga & Indoor games and sports club





Art-Craft Club



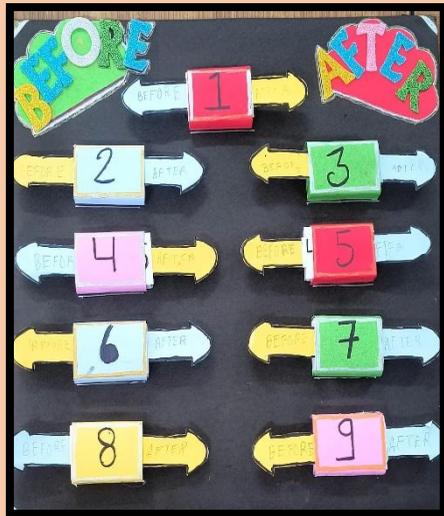
Art-Craft Club



Art-Craft Club



Maths Club



Music & Dance Club



Charity
and
Socio-
Awareness
Club





Charity and Socio- Awareness Club



Charity
and
Socio-
Awareness
Club





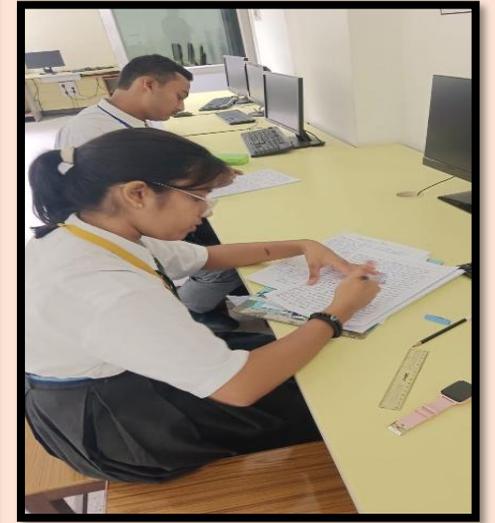
Charity and Socio- Awareness Club



Charity
and
Socio-
Awarenes
s Club



Literary Club





Science Club



WATER CONSERVATION BY DRIP IRRIGATION SYSTEM

MADE BY:
MOHA KUNDEL
MEDGAON
DISTRICT: RAJASOTA, GUJARAT



SICKLE CELL ANAEMIA - A GENETIC DISORDER -



DEFINITION - Sickle cell anaemia is a genetic blood disorder in which the red blood cells are abnormally shaped. It is caused by a change (mutation) in the gene.

CAUSES -

Sickle cell anaemia is caused by a genetic mutation in the gene that codes for the protein called haemoglobin. In all humans, the gene codes for the production of the protein in red blood cells. This protein carries oxygen from the lungs to the rest of the body.

RESULT OF MUTATION -

- The gene mutation causes the production of abnormal haemoglobin called HbS.
- HbS does not carry oxygen as well as normal haemoglobin.
- When there are too many HbS, the red blood cells become sticky and clump together.



SYMPTOMS -

- CHRONIC FATIGUE** - Due to the lower carrying capacity of sickle cells.
- PAIN CRISIS** - Sudden episodes of pain in joints and chest.
- SWELLING OF HANDS AND FEET** - Caused by blood vessel blockage.
- VISUAL PROBLEMS** - Caused by blocked blood vessels in the eye.
- INCREASED URINATION** - Due to reduced oxygen supply.



INHERITANCE PATTERN -

- It is an autosomal recessive disorder.
 - A person must inherit two defective genes (one from each parent) to be affected.
 - A person with one normal and one defective gene is a carrier.
 - 50% chance of passing the defective gene to offspring.
- | Genotype | Phenotype |
|---------------|-------------|
| AA (Normal) | No disease |
| Aa (Carrier) | No disease |
| aa (Affected) | Sickle cell |



GENOTYPE PHENOTYPE:-

Genotype	Phenotype	Condition
AA (Normal)	AA (Normal)	Normal
Aa (Carrier)	Aa (Carrier)	Very faint, mild symptoms
aa (Affected)	aa (Affected)	Severe sickle cell disease
AA + Aa	Aa + Aa	Carrier status
Aa + Aa	aa + aa	Autosomal recessive inheritance

- KEY TERMS:-**
- AA - Normal (homozygous)
 - Aa - Carrier (heterozygous)
 - aa - Sick sickle cell disease

TREATMENT OPTIONS -

- PAIN MANAGEMENT** - Painkillers (e.g., paracetamol) during pain crises.
- HYDRATION THERAPY** - Drinking plenty of fluids helps reduce sticking.
- BLOOD TRANSFUSIONS** - Increased number of normal RBCs.

- BONE MARROW TRANSPLANT** - Best curative treatment.
- GENE THERAPY** - Experimental, future possibility for permanent cure.
- VACCINATIONS AND ANTIBIOTICS** - To prevent infections due to weak immunity.



How does Kidney Dialysis Works?

"A Lifeline When Kidneys fail"

INTRODUCTION

- Kidneys filter waste, extra water, and toxins from our blood.
- They help maintain the body's fluid and chemical balance.
- When kidneys fail, waste build up and harms the body.
- Dialysis is a medical process that cleans the blood like healthy kidneys.

BENEFITS OF DIALYSIS

- Removes waste and toxins from the blood when kidneys stop working.
- Balances water and minerals like salts and potassium in the body.
- Reduces symptoms like swellings, tiredness and nausea.
- Controls blood pressure by removing extra fluid.
- Keeps patients alive while waiting for a kidney transplant.

TYPES OF DIALYSIS

Hemodialysis:

- Blood is pumped from the body into a machine.
- The machine removes waste and clean blood is returned to the body.

Peritoneal Dialysis:

- A special fluid is put into the abdomen.
- The lining of the abdomen filters waste & then fluid and waste is drained out.

FLOWCHART for DIALYSIS

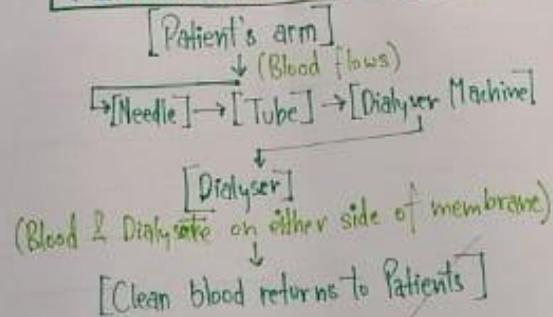
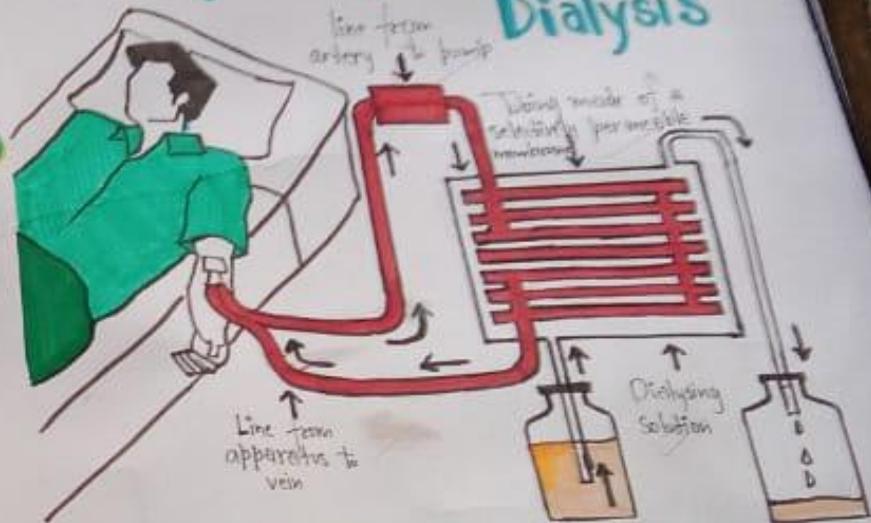


Diagram for Kidney Dialysis



HOW HEMODIALYSIS WORKS?

- In Hemodialysis, blood is taken out of body through a needle in the arm.
- The blood flows into a dialysis machine that contains a special filter called a dialyser (artificial kidney).
- The dialyser removes waste, extra water, and harmful substances from the blood.
- The cleaned blood is then returned back into the patient's body.
- This process usually takes 3 to 5 hours, and is done 2 to 3 times a week.
- Hemodialysis is done in hospitals, dialysis center, or sometimes at home with proper setup.
- It helps the patient stay healthy until they get a kidney transplant.



EVERYONE SHOULD KNOW THIS

Blood Pressure
120/80 mm/Hg

Haemoglobin
[Male]
13 - 18 gm/dl

Haemoglobin
[Female]
11.5 - 16 gm/dl

Iron
8-15
mcg/dl

Red Blood Cells
4.60-6 million
cells/ μ l

Pulse
70 - 100 pulses/min

Sodium
135 - 145
mcg/dL

Sugar
Children - 70-130
mg/dL
Adult - 70-115
mg/dL

Calcium
8.6 - 10.3
mcg/dL

Vitamin
(B12)
200 - 900
mg/dL

Temperature
36.8 - 37°C

Cholesterol
130 - 200
mg/dL

Triglyceride
220 mg/dL

White Blood Cells
4000 - 11000
cells/ μ L

Vitamin
(D3)
20 - 50 mg/dL

Potassium
3.50 - 5
mg/dL

Breathing
12 - 16
per min

The Amount of
Blood in Body
5 - 6 Litre

Platelets
150,000 - 400,000
cells/ μ L







SUSTAINABLE DEVELOPMENT
NATURE PROVIDES A FREE LUNCH BUT ONLY IF WE CLEAN UP AFTER

STEAM POWER GENERATOR

Y-MART

SMART CITY

GENSEC

Made by -
Chaitanya
Anshu
Siddhant
Siddhant
Siddhant

ELECTRICAL ENERGY

GENERATOR

BOILER

STEAM ENERGY



Garden Club







Yoga &
Indoor games and
sports club









Art-Craft Club





Maths Club



Music & Dance Club





Charity and Socio-Awareness Club







Literary Club



