

Narayani Public College

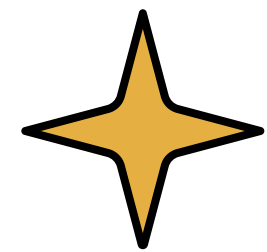
# Project Work

Teacher Bishnu Dawadi's


---

Creator





Hello and  
welcome to my  
**TODAY'S SESSION**



# INTRODUCTION OF WATER

Water is involved in just about everything our body does. It's a big part of the blood that brings nutrients to all our cells. We use it to get rid of wastes. It helps us regulate our body temperature. It acts as a shock absorber for our brain and spinal cord. We are very dependent on water.





# Types of Woter



**Surface  
Woter**



**Ground  
Woter**



**Storm  
Woter**



**Waste  
Woter**



# ★ Chemical Plus Physical Properties

- ★ Water can act as both acid and base, which means that it is amphoteric in nature
- ★ Water is the chemical substance with chemical formula  $\text{H}_2\text{O}$
- ★ Some covalent and ionic compounds can be hydrolyzed in water
- ★ During the process of photosynthesis, water is oxidized to  $\text{O}_2$
- ★ Water is a colourless and tasteless liquid



# SIGNIFICANCE

From those above types of water, we will be on ✨ focusing **waste water**.

Major Goals to accomplish on waste water :-

1. INTRODUCTION
2. PURIFICATION METHODS
3. USES



# Introduction of waste water



Wastewater is any water that has been affected in quality by human activities. Wastewater can develop from agricultural activities, urban water use, and sewer inflow and stormwater runoff just to name a few. Wastewater from a municipality is also called sewage. Most of us don't want to think about it, but at times the water that swirls in the bowl ends up being treated and ends up in our taps.



# PURIFICATION METHOD

Water purification, process by which undesired chemical compounds, organic and inorganic materials, and biological contaminants are removed from water. ✨  
Some General method of Purification of water are :-

1. Treating Water with Chemicals
2. Filtering out Contaminants
3. Killing Pathogens with Heat or Sunshine
4. Removing Large Particulates



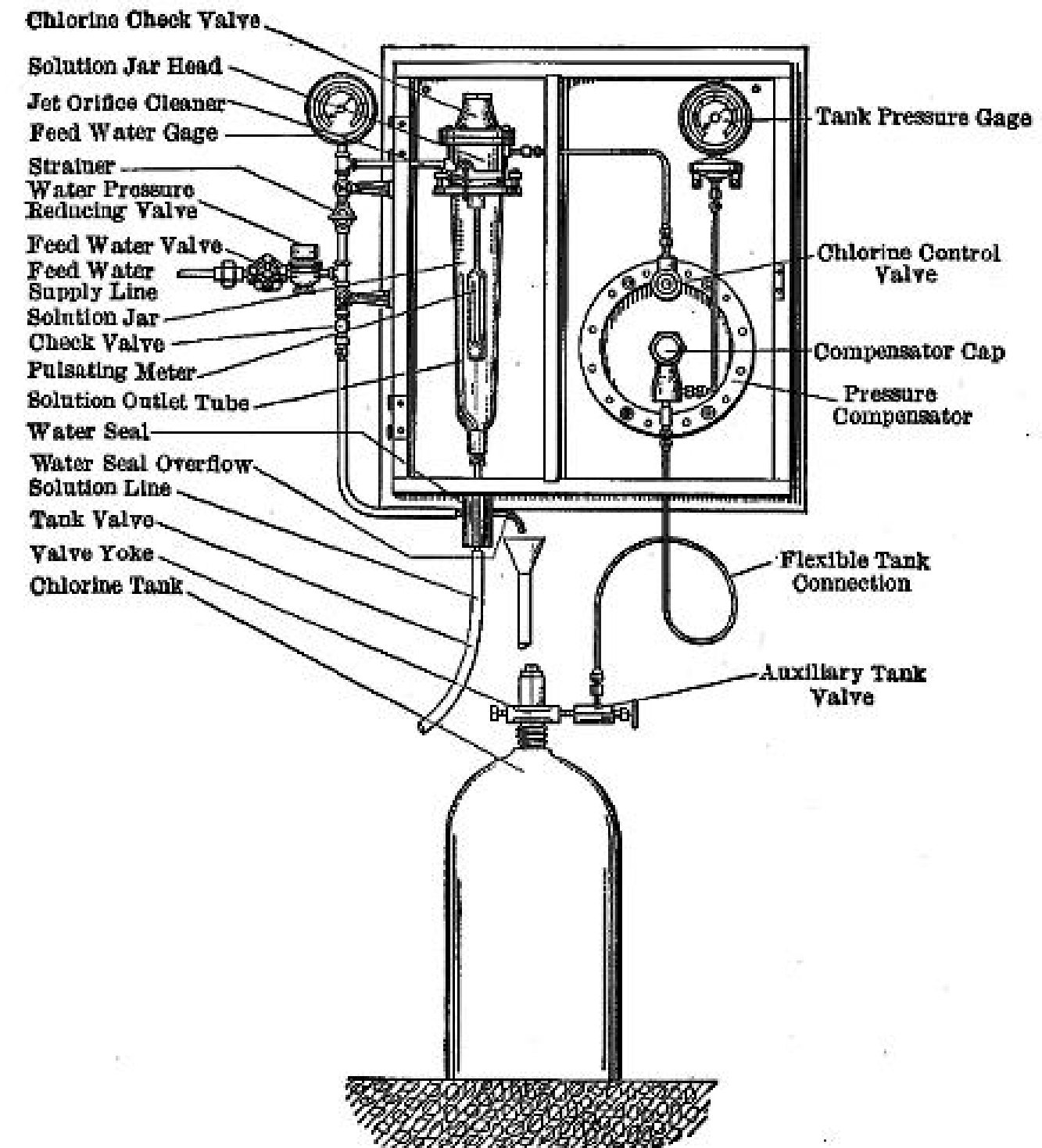


# 1 : TREATING WATER WITH CHEMICALS

Chlorine is a powerful chemical that has been in use for many years to treat water for home consumption. Chlorine is an effective water purification method that kills germs, parasites and other disease-causing organisms found in ground or tap water. Water can be purified using chlorine tablets or liquid chlorine.



# Chlorination Overview



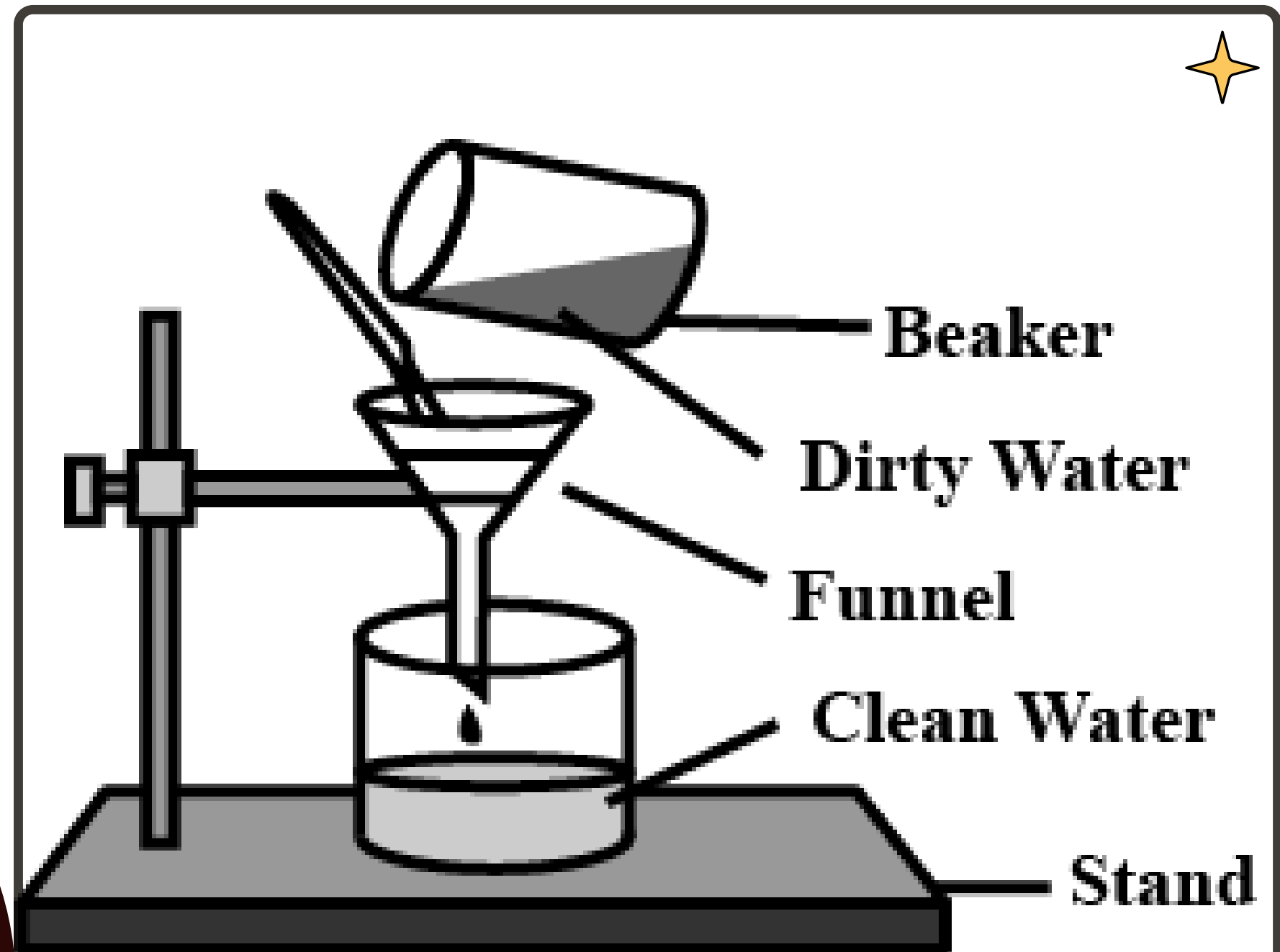
## 2 : FILTERING OUT CONTAMINANTS

Filtration is the process in which solid particles<sup>★</sup> in a liquid or gaseous fluid are removed by the use of a filter medium that allows the fluid to pass through while retaining the solid particles.

**Also scientifically proven method  
to get pure form of water**



# Filtration Overview





## 3 : KILLING PATHOGENS WITH HEAT OR SUNSHINE

Boiling is a very simple method of water disinfection. ✨  
Heating water to a high temperature, 100°C, kills most of the pathogenic organisms, particularly viruses and bacteria causing waterborne diseases.

**It's been practices decades over and very useful process to purify water.**



# Boiling Overview



**Verified by bear grills**

## 4 : REMOVING LARGE PARTICULATES

Sedimentation is the process of allowing ✨ particles in suspension in water to settle out of the suspension under the effect of gravity.

**Also verified by Doctors though**



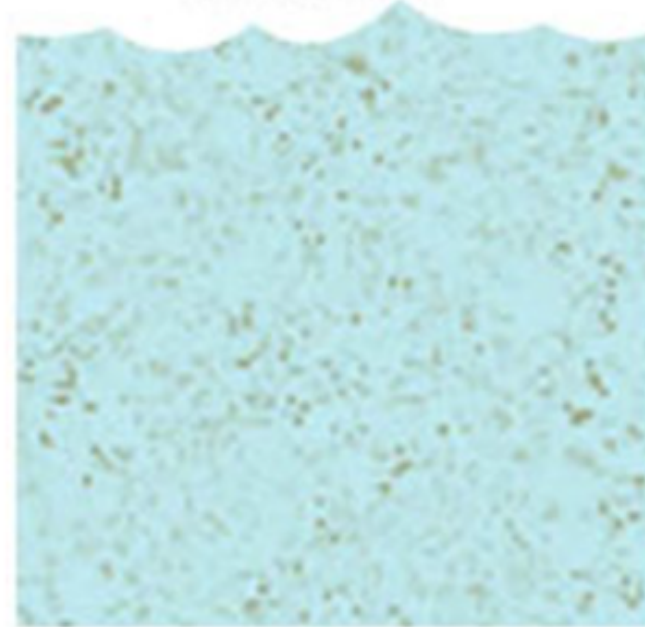


# Sedimentation Overview



## Sedimentation

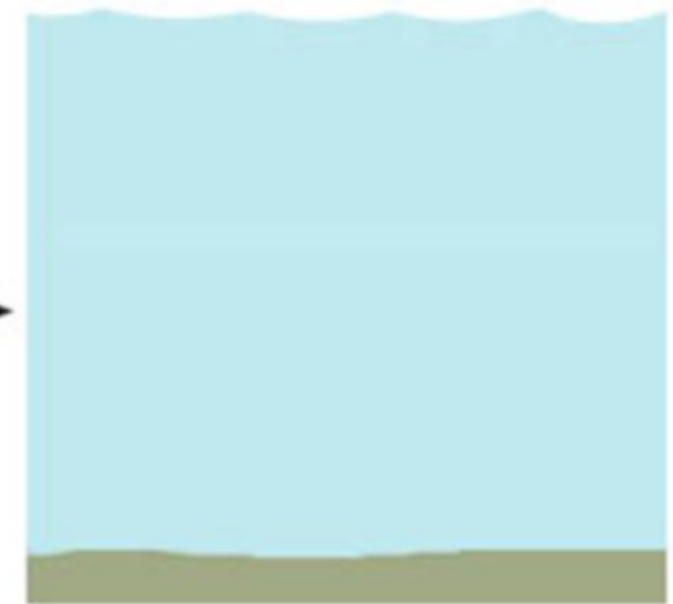
particles  
suspended  
in water



time



particles  
settled  
on bottom





# USES OF WASTE WATER

**CAR WASHING** ✨



**Floor Mopping** ✨



**Wash Utensils** ✨



# THANK YOU!

Do you have any questions  
for me before we go?

