

# PROJECT WORK OF H.P.E.

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Class: 8 'G'

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1) Prepare a project work on topic "Methods of water Purification". Explain the following methods of water purification.

#### a) Boiling Method;

- The method of water purification by boiling it is called as boiling method.
- The things we need to remember;
  - We have to boil water in a steel utensil.
  - We have to boil it for at least 3-5 minutes.
- Boiling method is a cheap and easy method of water purification.
- It is very good method of water purification as it makes water drinkable by killing the pathogenic germs in it.

#### b) Filtration method;

- It is the method of water purification in which we filter water to make it pure.
- It has two types. They are commercial filters and Homemade filters.
- Commercial filter is a filter which consist of filter candles where water gets filtered.
- Homemade filter is a filter in which the water from top flows down through layer of.

Sand, gravel, and collected in bottom container. It filters dust particles, mud but cannot kill micro-organisms.

### c) Chemical Method

- Chemical method is another method of water purification in which chemicals are used to purify water.
- The chemicals help to kill the microorganisms.
- We can use chemicals like iodine, chlorine, etc.
- After addition of chemical, they should be left for about 30 minutes before consumption as it takes time for chemical reaction in water.
- Some examples are: Piyush, waterguard, etc.

### d) SODIS method.

- It is also a method of water purification.
- Full form of SODIS method is Solar Disinfection.
- A clean, colorless & transparent plastic bottle is taken and fill with about  $\frac{2}{3}$  of water.
- Close the cap & gently shake the bottle for about 15-20 times.
- Now, fill the bottle completely and keep it under sun for about 6 hours at an angle of  $45^\circ$  with horizontal ground.

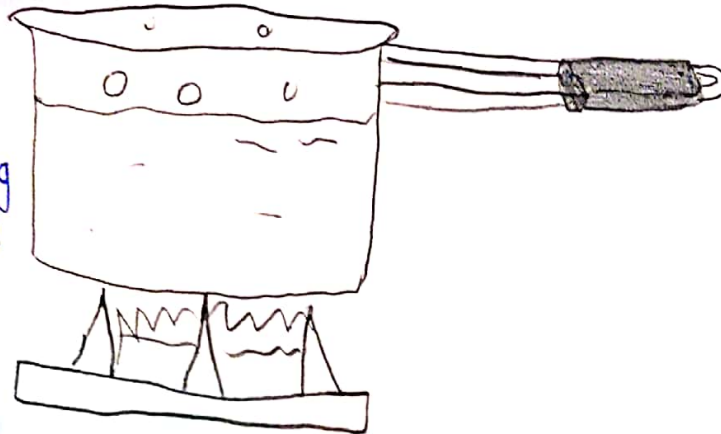


Figure;

a) Boiling method;

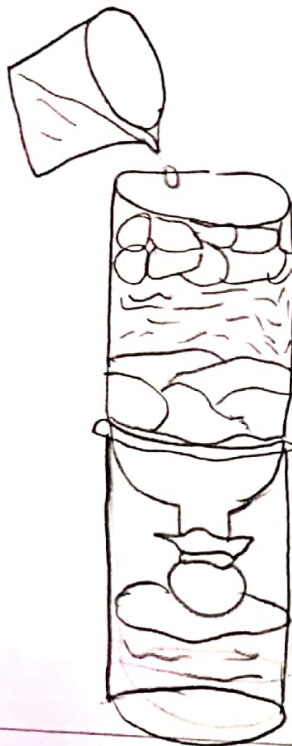


Fig: Boiling Method



b) Filtration method:

Fig: Homemade Filter.

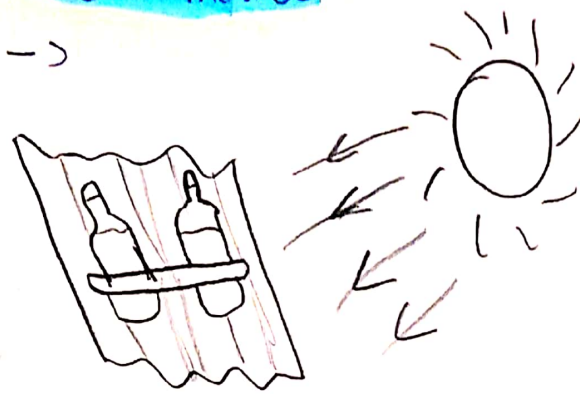


c) ~~SO~~ Chemical Method

Fig: PIYUSH PLUS



#### d) SODIS method



2) Malnutrition is observed more in children's, pregnant women & breast feeding women. Write down the causes of this situation and write your view to minimize this problem.

- The causes of malnutrition are;
- Deficiency of Carbohydrate & proteins.
  - Deficiency of Vitamin D, A, C, B, etc.
  - Deficiency of blood in body.
  - Deficiency of iodine in body.
  - Prolonged intake of packed food.
  - Poverty (as poor people can afford food)
  - Lack of awareness against it.
  - Poor sanitation in rural areas.
  - Lack of breastfeeding by mother.

→

→ In my opinion, we can minimize malnutrition by;

- Encouraging mothers for breast feeding.
- Getting rid of worms and other infection in children.
- ~~\*~~ Adding nutrient rich food in the diet.
- ~~Stay~~ Staying at sun at morning to gain vitamin D through sunshine.
- Going for Regular medical checkup.
- Cleaning ~~of~~ face and ~~eyeyes~~ eyes with clean water 3 times a day.
- Doing exercise everyday.
- Brushing twice a day.
- ~~Awareing~~ Raising people against it.
- Leaving the habit of taking drugs and chewing tobacco.

THE

END