

## P.6 SCIENCE CLASS WORK WEEK 3

### WEEK THREE 22<sup>ND</sup> JUNE 2020;

### LESSON ONE : DISEASES OF THE CIRCULATORY SYSTEM

#### HIV AND AIDS

#### **HIV and AIDS**

- ❖ HIV and aids is a disease that affects the circulatory system.
- ❖ **HIV** stands for: **Human Immunodeficiency Virus.**
- ❖ **AIDS** stands for : **Acquired Immune Deficiency Syndrome**
- ❖ This disease attacks one's immune system making the body lack defense to infections.
- ❖ The victim's body becomes weak or unable to defend itself from infections due to the destroyed white blood cells.
- ❖ HIV does not kill the victim, it's the secondary infections untreated that kill the victim.

#### Ways through which HIV and AIDS is spread.

- ❖ Having unprotected sex with an infected person.
- ❖ Sharing skin piercing objects with an infected person.
- ❖ Through transfusion of unscreened blood.
- ❖ Through some cultural practices such as circumcision.

#### Effects of AIDS.

- ❖ Having makes one's immunity destroyed resulting into easy attack by infection.
- ❖ AIDS causes death of the victim.
- ❖ A family or community can easily lose an important person in case of death.
- ❖ AIDS has led to orphans and increased number on street children.

#### Ways of controlling the spread of HIV and AIDS.

- ❖ having protected sex with trusted sex partners
- ❖ avoid sharing skin piercing objects with an infected person
- ❖ Through transfusion using screened blood.
- ❖ Avoid sharing knives during cultural practices such as circumcision/ tattooing.

#### NOTE:

- AIDS Victims should be given a lot of care by encouraging them to promote personal hygiene, feed well and take their drugs in time.
- Tuberculosis victims are mistaken to be HIV victims due to the same signs and symptoms.

#### **Learners' Activity**

1. Write the following in full
  - i) HIV
  - ii) AIDS
2. Identify the cause of AIDS
3. suggest two ways in which AIDS is spread
4. Why are adolescent girls at a higher risk of getting HIV and AIDS than boys of the same age group
5. Suggest a piece of advice adolescent boys and girls for the prevention of HIV and AIDS
6. List two disorders of the circulatory system.
7. Suggest one way of increasing the volume of blood circulation in the body.

### **Care of the organs of the circulatory system**

- Eating a balanced diet.
- Doing regulatory physical exercises
- Regular visits to hospital for medical check up
- Avoid eating too fatty/oil food stuffs.
- Avoid rough games.
- Take much care to accidents.

### **Ways of increasing volume of Blood in Circulation**

- Eating a balanced diet.
- Eating foods mainly rich in iron e.g. greens, animal liver and kidneys
- Taking ferrous tablets with advice from a medical worker.

# **THEME: HUMAN HEALTH**

## **TOPIC: ALCOHOL IN OUR SOCIETY**

### **SUBTOPIC: ALCOHOL**

#### **LESSON 2: TYPES OF ALCOHOL**

#### **Alcohol:**

Alcohol is a chemical substance that makes people drunk once taken in.

#### **Types of alcohol**

There are basically two types of alcohol namely;

- Ethyl (ethanol) alcohol.
- Methyl (methanol) alcohol.

**Ethyl (alcohol)** is the most common type of alcohol found in alcoholic drinks. It's the type of alcohol formed immediately after the ripening of a plant fruit.

Plant fruits ripen due to ethylene hormone.

**Methyl alcohol** (e.g. methanol) is the most dangerous type of alcohol. It can easily cause blindness in case of contact with the eyes.

#### **Examples of alcoholic drinks include:**

'Malwa', 'tonto' and beer.

#### **Reasons why people drink alcohol**

People drink alcohol for a number of reasons

- People drink alcohol due to excitement or happiness
- To celebrate their successes
- To forget their problems
- To quench thirst

#### **Learner's activity**

1. In one sentence, explain the term alcohol.
2. Identify any two examples of alcoholic drinks
3. Mention the two main types of alcohol.
4. Give any two reasons why people take alcohol

### **LESSON 3: METHODS OF PRODUCING ALCOHOL.**

There are basically two methods of producing alcohol namely;

- Fermentation method.
- Distillation method

#### **Fermentation method.**

Fermentation is the process of turning sugar from plant juice and water into alcohol. This is aided by yeast.

The sugar found in fruit juice is worked upon by yeast to form fermented alcohol.

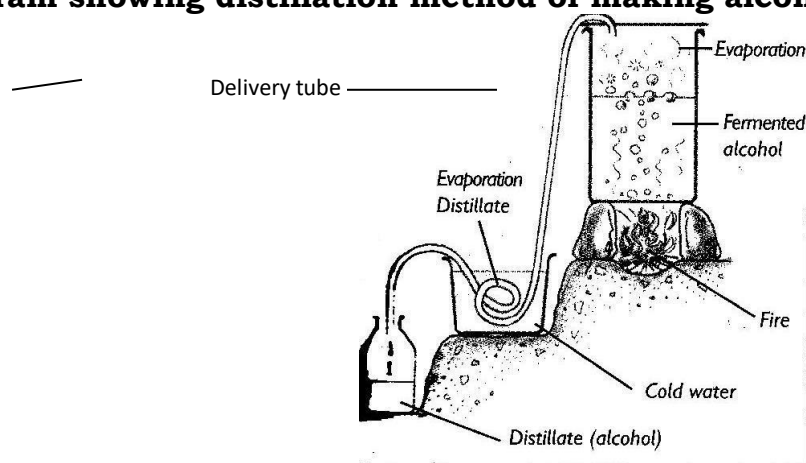
#### **Examples of plant materials used to produce fermented alcohol are;**

Ripe banana, cassava flour, maize, millet, sorghum

#### **Distillation method**

- This is a process of obtaining pure alcohol from fermented alcohol by boiling evaporating and condensing of the alcohol vapour to form distillate
- Distillation method involves two process namely evaporation and condensation of the vaporized alcohol into a liquid.
- The liquid obtained using this method is called a distillate.
- Examples of alcoholic drinks obtained through this method are waragi, whisky, rum gin, vodka.

#### **Diagram showing distillation method of making alcohol.**



- Heat source provides the heat to cause evaporation.
- Cold water helps to condense the vapourised alcohol into a liquid.
- Note: home distillation of alcohol is illegal due to the likely
- Accidents that may occur.

#### **Learner's activity**

1. In one sentence, explain each of the following terms;  
a) fermentation    b) distillation
2. State the importance of each of the following during distillation;  
a) cold water    ii) heat source
3. In one sentence, give a reason why home distillation of alcohol is illegal.

4. Give any three examples of plant local materials used to produce fermented alcohol
5. Define the term distillate
6. Why is the delivery tube usually made out of copper?

## **LESSON 4: ALCOHOLICS AND ALCOHOLISM**

### **Uses of alcohol in the society.**

- Alcohol is an important drug in the society recommended on most celebrations.
- Alcohol (methyl alcohol) is used by doctors to sterilize medical instruments that cannot be boiled on cleaning.
- Alcohol can be used in some thermometers.
- Alcohol (methylated spirit) can be used to clean the skin before an injection is taken.
- Alcohol is also used as a disinfectant on wounds.
- Alcohol can be used by builders to mix paints and dyes.

### **Alcoholism**

- This is a condition that results from the prolonged use of alcohol.
- It results into the body's addiction to alcohol.
- It also makes the body functioning controlled by the alcohol in take.
- The person who is who is addicted to taking alcohol for his or her normal body functioning is called an alcoholic.

### **Factors that may lead one to take alcohol**

- Stress
- Sad news
- Peer pressure
- Family background or life styles.
- Seductive advertisement.

### **Learner's activity**

1. Explain the following terms;
  - a] alcoholic
  - b] alcoholism
2. Mention any three factors that may lead to alcoholism
3. State any two ways in which alcohol is important in the society.
4. State how alcohol affects;
  - i] an individual
  - ii] the family
  - iii]. The community
5. State the law governing the use of alcohol in Uganda.

## **SUBTOPIC: ALCOHOL AND ALCOHOLISM.**

### **LESSON 5: EFFECTS OF ALCHOLISM.**

### **Effects of alcoholism.**

The habit of taking alcohol causes social and health problems in the society. These effects are caused to; individuals, family or the community.

#### **a) Individuals.**

The following are the effects that may result from alcoholism to an individual.

- It causes damages to body organs such as, liver, brain and stomach walls
- Leads to personal neglect .(self neglect)
- Leads to loss of appetite for food resulting into stomach ulcers.
- Leads to poverty since most of the money is spent on buying a alcohol.

#### **b) To the family;**

The following are effects that can be caused in case one of the family members is an alcoholic.

- Family poverty.
- Family neglect.
- Loss of family respect.
- Antisocial behavior, child abuse, separation of spouses.
- Causes immorality in children.

**c) To the community.**

- Alcoholism leads to road accidents by drivers working under the influence of alcohol.
- Alcoholism also leads to increased crime rates in the community.
- Alcoholic officials delay community services since most times they are drunk.

**Laws governing alcohol in Uganda.**

- Persons below 18yrs of age are not allowed to drunk alcohol in public places.
- All public places dealing in alcohol should be licensed after fulfilling certain standards.
- Drivers are not allowed to drive under the influence of alcohol.
- All forms of home distillations, transportation and possession of alcohol is illegal.