		Feeling of rejection. When people abuse hard drugs such as cocaine and wee, in the long run they may experience a feeling of rejection and loneliness. Such people often show lack of interest in social activities. Public education. People must be made aware of the dangerous of substance abuse and the need to stay away from substance abuse. Campaign to educate people on the effect of drug abuse can be done in churches, mosques, at festivals, in schools and other public gatherings. Public education can be done through the use of the following, i. posters ii. pamphlets iii. mobile vans with loud speakers. Establishment of treatment centres. Treatment centres can be set up for treating drug addicts. These centres will offer such people proper medication, counselling and how to get them to lead lives free of substance abuse. Enactment of laws. There must be laws to deal with drugs abuse. Laws on substance abuse must be fully enforced. People who break the laws must be punished. Parents involvement. Parents and other family members must be involved in education people with substance abuse behaviours.
social studies	9	1. Explain the term substance abuse. 3. what is a stimulant? Give any two examples. 4. Explain the term sedative. Give any two examples. 5. Give any four reasons why people abuse substance. 6.Write down any five effects of substance abuse on people. 7. State any four ways you can help to stop substance abuse.
social studies	1	Wash your hands before eating. Wash plates after eating. Wash your hands after eating.
social studies	1	Here are some safety practices in eating. 1. Sit up straight whenever you are eating. 2. Wash your hands with clean water before and after eating. 3. Do not take too much food into your mouth at a time. 4. Do not talk or sing while eating.
social studies	1	Wash your hands with soap after visiting the toilet.
social studies	1	There children are exercising. They want to be strong and healthy. Exercise makes us strong and healthy. Do you exercise?
social studies	1	They are washing dishes. They are sweeping.
social studies	1	1. We use the flesh of some animals as meat. Meat contains things that help us to grow strong and healthy. 2. We eat eggs often. Eggs contain things that make us grow strong and healthy. We get eggs from birds.
social studies	3	We are human beings. We need to use clean things to grow healthy. Dirt makes us sick. We become unhappy when we are sick. Sickness can destroy parts of our body. It can also kill us. We have to keep our body clean if we do not want to be sick. We keep our body clean if we bath. We also keep our bodies clean when we cut our nails, wash out clothes and brush our teeth.
social studies	3	We can also wash plates and bowls. We can sweep the living room and scrub the bathroom. We can also dispose off rubbish.
social studies	4	Dirty environment brings about diseases. How do we feel when we are sick? If we do not want to be sick, we have to keep the environment clean. We can do so by sweeping, weeding and desilting gutters or drains. Flies and germs live in filthy places. They grow well and multiply fast in filth. So of we desilt the gutters and remove all the garbage from the area, we kill them. We must put all rubbish into rubbish bins and cover them well to prevent flies from coming into our homes.
social studies	5	If the community is dirty and bushy, it serves as the living place for harmful animals like mosquitoes, snakes, tsetse flies, scorpions, houseflies, rats and mice. Houseflies spread cholera.
social studies	5	Mosquito bites give us malaria.
social studies	6	We can keep our community clean by sweeping all the dirt everyday. We can also keep the community clean by desilting choked gutters and weeding out all bushes in the community. We should always put rubbish into rubbish bins and cover them.
social studies	6	At school, boys and girls are to keep the compound clean and healthy. Staying in an unclean environment to learn will make you fall sick.
social studies	6	It is the responsibility of children to sweep the living room.
social studies	7	Water pollution: ....Water which is good for drinking becomes polluted when domestic waste like left-over food or faeces are thrown into it.
social studies	7	Water born diseases like cholera, guinea worm, diarrhoea and dysentry are the results of the pollution of water bodies. This measns that polluted water is not safe for drinking due to the presence of the above disease in it.
social studies	7	Proper disposal of waste-Litter bins should be provided at vantage points for the disposal of waste. These litter bins should be emptied regularly. Similarly, drivers of commercial vehicles should be made to provide litter bins in their vehicles for passengers to dispose any waste they generate when travelling. In schools, every class should have a waste disposal bin.
social studies	7	Adolescents who are unable to consult their parents or other extended family members about matters of their reproductive health, often end up living unhealthy life styles. They make wrong choices about their reproductive health and this often lead them to very bad situations.
social studies	7	Similarly, we may say that reproductive health is a broad term relating to reproductive matters and the functioning of the reproductive system.
social studies	7	Physical changes in girls: ii) Commencement of ovulation and menstruation. Ovulation is the release of egg or eggs by the ovaries in a girl or woman. Menstruation are therefore some of he normal changes that take place in adolescent girls.
social studies	7	(2) Avoidance of sexually transmitted diseases (STDs): Sexually transmitted diseases (STDs) are diseases that are spread through sexual intercourse. Some examples od STDs are gonorrhoea, syphilis and HIV/AIDS (Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome). Adolescents who abstain from sex are unlikely to contract any of these diseases.
social studies	7	(1) Early pregnancy: Unprotected sex during adolescence can result in unwanted or early pregnancy. If the adolescent girl is not well developed the pregnancy can lead to a number of problems. She may find it difficult to give birth. If there is no hospital nearby for the doctors to save her, she may die through complications. At times if the teenage mother is lucky to survive, the child may not be lucky. The child may suffer from head injury during birth due to the narrow canal it has to pass through. Also, early pregnancy can lead to permanent damage to the womb if the adolescent tries to abort it by herself or by an unqualified person. It can lead to her not having children. Sometimes the adolescent girl has to be operated upon to remove the child.
social studies	7	(2) Sexually transmitted disease (STDs) Adolescents who do not practice chastity are likely to contract sexually transmitted disease (STDs) like gonorrhoea, syphilis and HIV/AIDS. Gonorrhoea and syphilis can cause permanent damage to the womb thereby making it impossible for a girl to give birth. They can also make a man incapable of having children with his wife later in life. (3) Adolescent who do nit abstain from sex later on find it difficult to stay with one partner. This can lead to divorce. In the same way, when the other partner realizes that the wife or husband cannot give birth because of infections of STDs, the marriage may not last.

social studies	7	(1) Drug abuse: Drug abuse is the taking of drugs that have not been prescribed by a qualified medical officer. Some adolescents are influenced by their peers to take drugs such as marijuana (Indian hemp), alcoholic drinks, cocaine and cigarettes. Adolescents who involved themselves in these behaviour end up performing poorly in their academic work. This leads them to drop out of school. Finally, they end up as pick pocketers, armed robbers or truck pushers. Some also become mental patients and roam about in the streets or are sent to mental hospitals for treatment. Those who inject themselves with some of these drugs may also end up contracting diseases such as HIV/AIDS.
social studies	7	(3) The term reproductive health may be explained as a state of complete physical, mental and social well-being of the individual in all matters relating to the reproductive system and its functions.
social studies	7	(11) Adolescents who involve themselves in unprotected sex, risk dropping out of school, contracting STDs including HIV/AIDS and bringing shame onto their families.
social studies	7	Child abuse: The term child abuse refers to cruel treatment of children in the form of beating, scolding or cursing, insulting and calling of nasty names. Child abuse can take several forms; physical and mental. Parents may physically abuse their child or children with very harsh or harmful punishment. Another form of child abuse is sexual molestation or defilement and early marriage.
social studies	9	Effects on the family: (i) Poor maternal and child health: When the total family size increases continuously and too fast, the family will not be able to adequately cater for the health needs of all the members. Those who will be most afffected include pregnant women, nursing mothers and children. The family may not have the resources to ensure that pregnant women and children regularly attend hospital or clinic for check up and treatment when they fall sick. Also, nursing mothers may not have enough to eat and may not be in the right condition to ensure the healthy growth of both mother and child. Children of such families often lack certain basic nutrients and therefore suffer from diseases like kwashiorkor. Frequent births also put the woman's health at risk.
social studies	9	(iii) Sex education; Efforts should be made to educate the youth about the effects of early sex and prostitution. Couples and other individuals should be educated on how to use the menstrual cycle in order to avoid unwanted pregnancies.
social studies	9	(i) Proper upbringing of children: The problem of juvenile delinquency, armed robbery, drug abuse, early sex and others can be minimised if children are properly brought up as responsible individuals.
social studies	9	(v) Teenage pregnancy and early marriages: Because rapid population growth is connected with poverty, parents are sometimes forced to give out their daughters to marry at an early age. Some girls also engage in early sex because of poverty. These problems often lead to teenage pregnancy and its associated problems.
social studies	9	(iv) Accessibility of family life education programme: There is also the need to give special attention to adolescents by making the population and family education programme more accessible. Through this programme, adolescents would be educated on the functions of the sex organs and how they can be used responsibly. This will help reduce such problems as sexually transmitted diseases and HIV/AIDS, prostitution, early sex and teenage pregnancies.
social studies	9	(iii)Lack of supervision of children - often leads to child delinquency, early sex, teenage pregnancies and drug addiction
social studies	9	Increase in Crime - Some also engage in illegal activities including trading in prohibited substances like Marijuana(wee), cocaine and heroine.
social studies	9	(vi) Environmental pollution can cause the out-break of diseases such as cholera, diarrhoea, malaria and many others.
social studies	9	6) HIV/AIDS This is a disease that has threatened development in the country. It has affected the labour force. It has increased the number of orphans in the country. It is believed that 200 people catch/get the HIV virus everyday. Government is, therefore, faced with a big problem. The people have to be educated about the HIV/AIDS. This calls for monay and time chould help divert attention from other pressing national issues.
social studies	9	High rated of road accident: Road accidents occur almost daily on our roads especiaaly when Christmas and Easter celebrations are approaching. This is due to the nature of the roads and careless driving. Some of the roads are poorly constructed and in addition have developed pot holes. Some are narrow for the heavy articulator vehicles. In addition, the drivers overspeed, over take at the wrong places and disregard road signs. The drivers sometimes drink and even compete on the roads. Ghana was rated sixth in Africa in the number of road accidents. Road accidents are a real social problem to development in Ghana, because mot of the victims become incapable of contributin their quota to national development.
social studies	9	For example, a child who is deficient in protein may develop kwashiorkor - this means his growth is retarded with the nerves becoming weak, stomach protruding and the hair turning reddish.
social studies	9	High birth rate: Sex education should be intensified. The importance of family planning and the need to get employment before marriage underscored.
social studies	9	HIV/AIDS: There should be educational campaigns about this deadly diseases. Everyone should be made ware of it. The youth should be advised to practise the ABC of HIV/ADIS [A- abstinence; B- be faithful; C- use condoms]
social studies	9	(vii) Rate of road accidnets: Educating drivers about the dangers of reckless driving is another measure. Drivers who drive anyhow should be withdrawn from the transport industry.
social studies	9	Domestic Violence And Victims Support Unit (DOVVSU) of the Ghana Police Service - The women and Juvenile Unit (WAJU) now the DOVVSU of Ghana Police Service was established on 26th October, 1998. -The establishment of DOVVSU was in response to the increasing number of abuse and violence against women and children in the country.
social studies	9	Planned Parenthood Association of Ghana(PPAG). PPAG advised people on sexual reproductive health.
social studies	9	International Federation of Women Lawyers(FIDA). FIDA tried to protect the rights of women and children against sexual harassment, rape, child exploitation, etc.
social studies	9	Armed robbery, substance abuse, prostitution, internet fraught and sexually related violence, including rape and defilement. Armed robbery is reported to be on the increase among the youth and it is believed that those who engage in this are also drug addicts
social studies	9	Apart from the disgrace such activities bring on the individuals, prostitution can lead to the contraction of sexually transmitted diseases including gonorrhoea and HIV/AIDS.
social studies	4	If we drop litter there will be lots of rubbish on the streets. Rubbish brings rats and diseases.

social studies	4	We can all help to reduce disease - one of the first and easiest things we can do is to wash our hands before eating and after going to the toilet
social studies	4	I keep getting malaria. There is a lot of standing water near my house. I don't use a mosquito net. Take medicine. Get a mosquito net. Talk to my neighbours about improving the environment. Go to the pharmacy to get medicine. Go to local UNICEF office to find out whether they have any mosquito nets or buy a mosquito net.
social studies	4	Role play: Work in groups of four. Imagine an Auntie caning a child harshly because he or she has lost some money and the refusing to take her to hospital. The neighbours tell the Auntie that it is wrong and she must take the child to hospital.
social studies	5	For example, a peer group may encourage you to get involved in premarital sexual relationship leading to teenage pregnancy or contracting STDs/HIV and AIDS.
social studies	5	Peer groups and drugs: Drugs are chemicals which affect the body and how it works. Drugs can be smoked, taken as liquid, pills or injected. Some drugs, including alcohol, tobacco, marijuana, cocaine, and heroin, affect how people feel. They may make people feel good for a short time but afterwards the people often feel unhappy and become ill. These drugs are bad for our health They are also addictive. This means people keep taking them again and again and cannnot stop easily. When someone is addicted they will do anything to get more drugs including stealing and hurting people they love.
		Alcohol and nicotine (the drug in tobacco) are legal drugs. Nevertheless, these drugs remain harmful and many people abuse them by drinking or smoking too much. Alcohol can make people very violent and affect their judjement. Cigarette smoking can lead to bronchitis and other chest diseases for the smoker and family. Heroin, marijuana (wee) and cocain are illegal. It is against the law in Ghana to buy or sell them. People who carry them can be arrested, tried in court and sent to prison. Someone taking marijuana may become very lazy and lack focus.
		Often young people can be persuaded by their peers to take drugs. As a result they may become addicted, ill and unable to carry out their everyday tasks. They might drop out of school and expose themselves to danger. Taking drugs can lead to further trouble and crime. Drugs cost a lot of money and it is easy to get addicted to them. Many poeple who take drugs, rob and steal to get the money to pay for the drugs. If you find that young peers are taking drugs, you should not join in . You must think about how it will have a negative impact on your life. Try to find a better group of friends who will help you to achieve your potential instead.
social studies	5	Accidents at home: Common accidents at home include electric shocks, animal bites, cuts, burns, posoning and falls. These accidents usually happen because people are careless or try to do things too quickly. For example, they leave a pot of boiling water on the fire within reach of a child. Or they forget to turn the iron off. Or they leave items on the floor where poeple can easily trip.
social studies	5	Accident in the community:Road accidents endanger our lives daily in the community. They usually happen through * Careless driving: e.g. using a mobile phone while driving, * Tiredness: continuing to drive even while falling asleep, * meanness: e.g. not mending mechanical faults to avoid spending the money. * alcohol: driving after drinking alcohol. Then the driver cannot think quickly and stop quickly if he or she needs to * speeding: driging too fast: going too fast round bends. Road accidents are very dangerous. Both drivers and pedestrians can easily be killed. Road accidents can happen to anyone, but especially to young children who don't realise how dangerous the road and cars can be Young children often don't pay enough attention when crossing the road.
social studies	5	Danger in the community: Other dangers we face in our community are caused by attitudes such as laziness and selfishness. Laziness causes people to dump rubbish by the side of the streets, throw rubbish around houses and not clean their gutters. All of these create unnecessary dangers for us. Rubbish dumping grounds become breeding places for mosquitoes and rats, both of which vary diseaeses. Not cleaning your gutter increases the risk of flooding not just to your own home but also to your neighbor's home.
social studies	5	Domestic violence: Domestic violence is violence at home, or within the family. For example, a parent may beat a child to the point of hurting the child. This can happen when the child is a house help. Children can also be made to do heavy physical work - adult work- which puts too much of a strain on their bodies and puts them in danger. Some parents can be very cruel to each other. When conflicts turn into figting they endanger our lives.
social studies	5	Ensuring safety at home: We can something to prevent most accidents. One of the ways we can prevent accidents is being careful. We can prevent accidents at home by: *not overloading electrical sockets, * turning off irons, kettles and other electrical gadgets, * storing knives away safely, * keeping children from fire, * keeping floors clean so that people don't trip and fall.
social studies	5	Keeping a clean home: We have to learn to separate the kinds of rubbish we make in the home. For example, separating plastics, from bottles, cans and garbage. It is important to do this because some rubbish, like vegetable peelings, can be recyled in a week. But some rubbish, like pure water bags take up to 100 years to decompose! If we separate our rubbish, we can recycle a lot of it. Paper can be collected and used to make more paper. Plastic bags, bottles and glass jars can be used again. Fruit peelings and garden waste can be used to make compost for out gardents.
social studies	5	Ensuring satefy in the community: We should report all crinical activities to the police or elders in the community or to the neighborhood watch dog. Children, especially girls, should refuse gifts from strangers. Bee suspicious if adults offer you sweets and never agree to go into their rooms, get in a car or go away with them. Some people try to force children into sexual activities or into taking drugs. Always say no to those who try to force you into sex or to drugs. Tell an adult you trust about what happened as soon as possible.
social studies	5	Ensuring safety on the road: Be careful when crossing the road to avoid accidents; * Cross where the road is straight. * Do not cross near a bend or a curve. * Do not cross where cars are parked. * Look both ways and listen carefully. *Cross at a zebra crossing if there is one.
social studies	5	Walking along the road: When walking along the road be carefuly. Walk so that you face the oncoming vehicle. Do not play with a ball or toys along the roadside. Don't try to cross the road if the traffic lights are green and telling the cars to go. At night wear light-coloured clothes to that you can be seen by drivers.
social studies	5	Road signs: Road signs help people to use the road safely. Learn some road signs.
social studies	5	Protecting our health: If we are healthy oursevles we can keep our bodies safe from illness. To protect our health we need to practise personal hygiene. We have to wash our bodies regularly. Washing ourselves every day helps us to make sure we don't pick up diseases. We should always wash our hands after visiting the toilet and before eating. Our clothes should also be kept clean always. The food that we eat should always be well cooked and any left over food should be kept cool. We also need to make sure that we drink clean water. Many very dangerous diseases are carried in dirty water. Our homes and surroundings should be clearn if we want to protect our health. In particular we need to clean the kitchen area, utensils and the bathroom.
		We need to avoid disease-carrying insects and animals. We shouldn't leave food outside where it attracts rats and cockroaches. We can use insecticides to kill houseflies and mosquitoes. We can sweep the compound every day so that stagnant water doet not stay. Stagnant water is a breeding ground or mosquitoes which give us malaria. Sleeping under a mosquitoe net is one of the best ways to avoid getting malaria.

social studies	5	We need to keep our environment clean by disposing of liquid and solid waste properly. Never dispose of waste of any type in a river, lake or sea.
social studies	5	3. List four things you will do to ensure your safety when walking along the road. 4. Explain how you prevent two accidents in the home.
social studies	5	Female genital mutilation is where some part of the female organ (private part of the female) is cut off. It is very painful. Sometimes the woman bleed and even die. Some are unable to give birth in the future.
social studies	6	If friends do not know about these chances, they can give you incorrect information such as : * Menstruation is abnormal X *If you have sex, it stops menstrual pain X * Wet dreams are caused by spirits X * HIV and AIDS is cured when you have sex with a virgin X * You become of you do not have sex X None of the above is true! Such incorrect ideas are dangerous because they can lead you to take unnecessary risk. For example, you could take part in sexual behaviour when you are too young. Make sure you find out correct information from books, or adults, before having sex.
social studies	6	You may think to starting to smoke`, take 'wee' and drink alcohol because you think this makes you look grown. It is easy to become addicted to these drugs. Drug addition is when you cannot stop using the drug- even if you want to. Drug abuse can affect you forever.
social studies	6	Teenage pregnancy Some girls are misled into sexual activities. They feel as if they are in love with someone and are persuaded into having sex. They get pregnant. This means they have drop out of school in order to look after the baby. The men or boys who get them pregnant often don't take responsibility for the baby. The girls are therefore left in sorrow.
social studies	6	HIV and STIs The more people you have sex with the greater the risk of catching a sexually transmitted disease (STI), or HIV (Human Immuno deficiency virus). These are very serious diseases. You usually get them by having unprotected sex. If you get HIV, it can lead to AIDS (Acquired Immune Deficiency Syndrome) and you will die. At the moment there is no cure for AIDS. Young girls who live in the streets are vulnerable- they can easily be abused by men. Some of these men have STIs and HIV. They give this diseases to the young girls.
social studies	6	You must learn to say 'no' to the opposite sex when they make advances at your for sex. It is okay to say 'no' is someone tries to kiss you or touch your and you do not want them to do so. You must build up confidence in refusing such advances You have a right to protect your own body. No one can force you to take part in sexual activity if you don't want to. Learn to say 'no' is an older person asks you to do into his or her room. Some adults trick young people to go into their rooms. Then they lock the door and defile the young girl or boy. It is okey to say 'no' to any adult if you don't feel safe. Whilst you learn to avoid other people's attempts for sex, you must also respect the sexual rights of others. This means as we get older we must respect the feelings of our boyfriend or girlfriend and not pressurise them to have pre-marital sex. We must learn to behave responsibly to others.
social studies	6	Personal hygiene During adolescence you have to be careful about your personal hygiene. It is important to look after your bodies and stay clean in order to feel good and have pride in yourself. You should * clean you teeth regularly * wash regularly * use lime or deodorant to remove body odour * keep your community, house and rooms clean * take good care of your sexual organs * change pads regularly during menstruation
social studies	6	Activities 1. Explain hoe to keep yourself clean. 2. In pairs discuss why it is important to keep clean. 3. Essay: How will good habits towards health and hygiene during adolescence affect those around you and your community? Organise your essay as follows: paragraph 1 : Good habits for hygiene. Paragraph 2 : How good hygiene affects you and your family. Paragraph 3: How good hygiene affects your community.
social studies	6	If you are not going to school or working, it is easier to get into bad peer groups who persuade you to start using drugs. Drugs are very expensive. People often rob and steal to make sure they have enough money to pay for drugs. With an increased crime wave due to drugs, the country will not feel safe.
social studies	6	Activities 1. In same sex groups choose one of the following problems. Discuss and give there ways in which it can affect the nation. Report back to class and share your ideas for each of the problems. a. STIs, HIV and AIDS b. Teenage pregnancy c. Streetism and poverty d. Drug abuse
social studies	6	2. Image that some young people in your community have got involved in drugs and are stealing from people to pay for the drugs. In pairs give two ways in which it affects: * the victims * the safety of the community
social studies	6	How could the above situation affect the future of the * drug abusers? * the community? * the families of the drug abusers? * the nation?
social studies	6	2. Which of these statements is true? a. Sex stops menstrual pains b. Sex with a virgin cures HIV and AIDS. c. Without sex the adolescent will become a toke (fool). d. Avoiding sex when young keeps you healthy.
social studies	6	4. State three things you can do to maintain personal hygiene.
social studies	6	The bank of this river is polluted with plastic bags. Water is made unsafe to drink by people dumping waste into rivers. Lakes and streams. We endanger our water when we wash our clothes and ourselves in river, streams and lakes. The chemicals from the soap stay in the after. Some drivers also wash their vehicles on roads close to rivers and the dirty water flows back into the rivers. All these activities polluted the water and make it unsafe to drink. Some people defecate or urine into rivers, lakes or the sea. Ehen this happens the after is polluted by human waste. Similarly if latrines are built too close to water, the human waste is washed into the water by the rain. If you drink polluted water, you can get sick. Industries sometimes dump waste chemicals or products into nearby water and poison the water. When after is polluted it is not only bad for humans to drink but is also poisonous for the plants and animals.
social studies	6	1. Make a list of three ways in which water can be polluted. 2.Eesearch: in groups check streams, rivers or lakes nearby. Do they look clean, or dirty? How do people use people use this water source? Are any of their activities endangering the water?
social studies	6	People who smoke cigarettes pollute the air with the exhaled smoke. This smoke increase the risk of lung cancer for themselves and other people who have to inhale the exhale cigarette smoke. These people often get lung cancer after many years- for example after 20 to 30 years.
social studies	6	We can stop water pollution through the following: * Avoid using the river and streams as toilets. * Tell farmers not to use fertilisers close to rivers. * Prevent animals from defecating into rivers. * Prevent factories from putting their waste into rivers. * Clean gutters of waste. * Avoid cutting down trees around the rivers. * Avoid dumping refuse into rivers or lakes.
social studies	6	Domestic violence: * Family conflicts * Reasons for conflict * Effects of family conflict * Conflicts resolution * Peace and unity

social studies	6	Domestic violence Domestic violence is violence that happens in the home. Domestic violence can include * verbal abuse such as shouting and insults * physical abuse such as beating * sexual abuse such as defilement The victims of domestic violence can be both adults and children. In many homes in Ghana, there are quarrels and fighting among close relatives. Husbands beat their wives, parents beat their children. Children quarrel and beat each other. Such situations lead to a lot of pain and unhappiness at home.
social studies	6	Fighting can first lead to hurt, disappointment, resentment and finally hatred. Another name for fighting and misunderstanding is conflict. Such misunderstanding tears relations apart. It means people disagree with each other and they cannot find a solution to their problems. It can cause physical, mental and emotional pain to individuals.
social studies	6	Activities 1. Explain these: a. domestic violence b. conflict 2. Look at the picture in the text above. Draw your own picture showing domestic violence. Share your picture with the other pupils in the class. What situations are shown in everybody's picture? Fig. Describe why this man is in the wrong.
social studies	6	Case study: conflict at home The mother tried to talk to Kwesi, but he refused to obey her. One day she got frustrated and very cross with Kwesi and started beating home. She got so cross she didn't realise she was hurting Kwesi badly and he lost an eye, Afterwards, Kwesi could not forgive his mother. There was always trouble in the house.
social studies	6	2. Give three reasons why there is often domestic violence at home? 3. In pairs talk about two cases of domestic violence you have read, heard about or known.
social studies	6	Effects of domestic violence on family A family is expected to plan together and find solutions together. However, conflicts and domestic violence can change the harmony at hoe, Domestic violence often results in the father and the mother deciding to live separately. The children can no longer live with both parents. Sometimes children go to live with one of the parents. In many instances however the children have to live with other people. This can result in child abuse. Child abuse can take different forms: * asking children to do labour that is too heavy for them. eg washing clothes for the whole household. * not being fed. * being physically beaten * being discriminated against * being shouted at * being force to stop schooling. Children often feel afraid if they are shout or beaten. This can make them lose confidence in themselves. This can then affect their education. Because of the way the children are treated they find it hard to relate well with others, and can become aggressive.
social studies	6	Case study: Issa Mohammed Issa Mohammed was the only son of Mr Ayaaba and Winifred Dazie. They live happily together in Tamale. Over the years, Winifred started complain about her husband's late return from work and they began to argue often. Eventually, Mr Ayaaba divorced his wife. Winifred went back to Shama where she came from. Issa stayed with his father bur Mr Ayaaba married again. His new wife did not want to feed Issa. Therefore Issa decided to do some hawking to feed himself. He later stopped school and became very unhappy.
social studies	6	Activities 1. Read the cause study. Discuss in groups the effects of the domestic violence in Mr Ayaaba's house. 2. Suggest two ways that Mr Ayaaba and Winifred Dadzie could have avoided problems at home. 3. In pairs make a list of three possible effects of domestic violence on the family. 4. Project: read newspapers and find cases of domestic violence and conflict. Report back to class on what you found.
social studies	6	Domestic violence law In Ghana, there are many reports about violence at home. These reports appear in newspaper, on the Internet and on TV and radio. To prevent violence at hoe, some Human Rights Organisations appealed to Government to pass a law making domestic violence illegal. The organisations include the Woman Caucus in Parliament, the Federation of Woman Lawyers (FIDA) and the Commission on Human Rights and Administrative Justice (CHRAJ). The government has passed a law, called the Domestic Violence Law. Which can punish people who maltreat others at home. The law is not only for women and children but also for men. Fig. female lawyers advocated for domestic violence bill to passed
social studies	6	Activity 1. In groups discuss and give three reasons why it is important to have a law punishing those who commit violence at home. 2. Assignment: Use the internet or resource person to find out more about the Domestic Violence Law in Ghana.
science	7	Useful words. Contraceptive: Something that stops a woman from becoming pregnant when she has sex.
science	7	GHANA WEEKLY HEALTH NEWS-July 20-26. 2003 Cholera Outbreak. Mr. Yahaya is a hospital health inspector in one of our large towns. He is responsible for preventing diseases. Some people were rushed to his hospital one afternoon. He examined each patient carefully, and found that they were all vomiting and had severe diarrhoea. He there hypothesised that there had been a cholera outbreak. He decided to investigate the cause of the cholera outbreak. He talked to the patients, and discovered that only some members of each family were sick. He asked each patient about their surroundings, and about the food and water they had eaten and drunk, and where it came from. He recorded their answers. Mr. Yahaya found out that some of the patients ate cold and cooked food brought from outside, and some had also drunk raw water from shallow well. They all lived in clean surroundings. Next, Mr. Yahaya visited the families of some of the patients and asked them the same questions. He found out that these healthy people had prepared their own food and eaten it hot. They also drank treated water. He therefore suggested that the outbreak could have been caused by people eating contaminated food, drinking contaminated water, or both. He collected samples of the food and water, and carried out laboratory tests with part of the samples. He asked his assistant to carry out similar tests, and they compared their results, which were the same. Their conclusion was that the street food and the untreated water contained cholera germs.
science	7	Activity 10 Making water safe. a. Work in groups. Use the scientific method to plan how to make water from a pond or well safe for drinking. b. Carry out your experiment if you can.
science	7	Activity 11 Getting rid of mosquitoes Work in groups. Use the scientific method to plan how to make the environment free of mosquitoes, to prevent malaria from occurring.
science	7	Activity 12 Refuse disposal Work in groups. Use the scientific method to get rid of refuse safely.
science	7	Activity 13 Doctors and witches. a. Work in groups. Describe how a doctor uses the scientific method to find out what is wrong with you when you are ill. b. Some people blame their sickness on their mother or aunts for witchcraft. Explain why blaming witchcraft for an illness can be dangerous.
science	7	Superstition may cause scientific explanations to be rejected, and can also cause harm. For instance, there are taboo in some parts of Ghana where pregnant woman are not supposed to eat crabs or snails. However, it is a scientific fact that these food contain calcium ions The baby needs calcium for strong bone and teeth formation, so following the taboo through lack of scientific knowledge can harm a developing baby.
science	7	As the population increases, more money has to be spent on the population by the government. Water supplies, hospitals, schools, houses and many other things have been increased. Birth control is important, so there are continuous efforts to produce better contraceptives.
science	7	There is world-wide environmental pollution when a nuclear bomb is used, Bombs were dropped on two Japanese cities in 1945. Descendants of those who were injured still show some defects.
science	7	In science lessons, you may also have to use special equipment and materials. Your teacher will warn you in advance of any possible hazards associated with these items. Hence, in science, there are risks which you must be aware of so that you can behave in a safe way. In this unit, you will learn about some of these hazards and how they can be reduces. Work safely!

science	7	Useful words. Hazard: An item or action that poses danger or that may cause an accident. Accident: An event that cause an injury to one or more people; it may also cause damage to property.causalty: A person who has been injured in accident. occupational hazard: Any danger, accident or risk that comes from a particular type of work. precaution: An action taken to avoid or reduce the risk of an accident. apparatus: Equipment used in scientific experiment. minor injury: an injury which can be easily dealt with, without having to visit clinic or hospital. toxic :Describes a poisonous substance. inflammable: Describes a substance easily catches fires. corrosive: Describes a substance which eats away at other material.
science	7	Activity 1 What do you remember? Work in groups to discuss the answers to these questions. a. List four accidents that could happen in school. State the consequences of each accident. b For each in your list, state how it could have been prevented. C. look back through the earlier units in this book. Note down some situation s where you might have been at risk. describe how you avoided coming to any harm.
science	7	Learning objectives * Give examples of hazards * Describe the effects of hazards on victims. Accidents can happen anywhere-- at home, at school, when you are playing, when you are working. To avoid accidents, you need to be conscious of hazards-- that is anything which is dangerous and which could lead to an accident happening. Accident could happen because you do not know a particular hazard, because you have forgotten a hazard, or simply through carelessness. Your science teacher will be aware of the hazards involved in your lessons and will advice you how to avoid them. However , this does not mean that you do not have any responsibility yourself! you must pay close attention to what you are told, learn about the hazards and how to avoid them.
science	7	Activity 2 Accidents at school Where are special hazards in a school science lab, Some are shown in the illustrations. Work in groups to answer these questions. a. Study Figs 1-6 and discuss the hazard in each pictures, Where appropriate , use technical terms such as toxic, corrosive, and inflammable from the list on page 55. b. Suggest how each of the accidents could have been avoided. c. Think about what happens when you study science at school. Could any of the accidents shown in the pictures happen in a science lesson? d. Compare your group's work with that of the other groups.
science	7	The pictures show some of the following kinds of accidents: * burnt fingers caused by lifting a hot object without using a pad. * electrical items left on unsupervised. * fires caused by careless use of candles or other flames. * cuts caused by sharp tools. * touching electrical equipment with wet hands. * slips caused by water on the floor, or tripping over things left lying on the floor. They should give you some ideas about how to work safely in a science lesson. For example, don't leave bags lying on the floor where someone might trip up, and take care when using laboratory glassware-- if it breaks, don't touch the pieces bot ask your teacher for help.
science	7	Effects of accidents Here are some of the effects of accidents which can occur when studying science: * burns * loss of blood * fractured bones * loss of property * cuts * time lost at school * suffocation * the cost of drugs * electric shocks * death All of these things prevent the victim from functioning properly.
science	7	Activity 3 Accidental effects a. Look again at Fig 1-6. b. In groups. List the effects of each accident shown. C. Consider any hazards which might occur in a science lesson. What might their effects be? d. Compare your group's work with that of the other groups.
science	7	Learning objectives *Identify and interpret warning signs. * State and explain safety precautions for work in science.
science	7	When something goes wrong, people sometimes say,' It wasn't my fault!'They are trying to avoid being blamed for what has happened. That's not good enough in science. You need to think ahead, listen to your teacher and avoid hazards so that you won't be responsible for an accident. What are the hazard you will meet in science? Here are some: * flames, heaters. * harmful chemicals such as acids. * harmful biological materials. * sharp objects such as knives * breakable equipment. * heavy weights. * loud noises and bright lights. You should be aware of many of these simply from your everyday experience. If you are not sure, don't be embarrassed to ask your teacher. Because some hazards are unfamiliar, there are special signs which will warn you about certain hazards. Fig 7 shows a selection of these.
science	7	Activity 4 Warning signs a. Look at the hazard warning signs shown in Fig 7. Make sure that you know what each one means. b. Suggest where each sign might be found. c. Suggest why it is useful to have standard warning signs that are used all around the worlds. d. Learn the signs and then test your friends e. Prepare an exhibition of safety signs for a community display.
science	7	Rules for safety The chart shows some safety rules which you should obey when in a science lesson. Rules for safe working * Wear eye protection (goggles), gloves or other protective clothing when instructed to do so. * Check the label on any bottle of chemicals which you are using. *Use the amounts of materials stated in the instructions. * When heating substances in a test-tube, always point the mouth of the tube away from yourself and other people. * Report breakages immediately. * Wash your hands thoroughly after handling chemicals or biological materials. * Do not hold hot apparatus with your bare hands. * Do not eat or drink in the lab. * Do not mix chemicals unless told to do so. * Do not taste or drink any chemical in the lab unless told to do so by your teacher. If you accidentally get anything in your mouth, rinse your mouth out with lots of water.
science	7	Activity 5 Making sense of safety a. In a group, study the rules for safe working shown above. b. For each rule, give a reason to explain why it is important. c. Suggest one or two additional rules to the list.
science	7	Your school will have at least one first aid box, like one shown in Fig9. This contains equipment suitable for dealing with minor injuries. Fig9 Items in a first aid box. Do you know what they are all used for?
science	7	Activity 6 When accidents happen… Sometimes, accidents do happen. They may be in science class, or somewhere else at school. Find out to whom you should report an injury. How can an injured student be rushed to the hospital or clinic?
science	7	Summary * There are a number of hazards which are encountered in science lessons. * Special signs are used to warn of hazards. * Accidents can be prevented by following some simple rules.
science	7	Objective questions 1. Which of the following can cause an accident? A. clear floors in classrooms and corridors B. a dry floor C. bas lying around on the floor D. a large classroom or compound
science	7	2.Which of the following is not a possible effect of an accident in the classroom? A. saving time B. loss of money C.loss of time D.broken bones
science	7	3.Which of the following correctly describes a hazard? A. When someone is injured as a result of carelessness. B.Something which you do not expect to happen. C. Something which can cause an accident. D.When someone has forgotten how to work safely.
science	7	4.Which of the following is not a possible cause of an accident? A. acting carelessly B. not knowing when something is hazardous C. being aware of the safety rules D. ignoring the teacher's instructions
science	7	5.What should you do immediately after handling chemical or biological materials in a science lesson? A. Write your observations in your notebook. B. Wash your hands thoroughly. C. Eat your lunch and have a drink. D. Throw them in the waste bin.

science	7	6.Which of the following are permitted in a science room? ruining, eating, drinking, writing A. all of them B. just writing C. just eating and drinking D. just running and writing
science	7	7.Which The symbol shown here means: A. People wearing spectacle are not admitted. B. eye protection is stored near here. C. Eye protection must be worn. D. Eye protection is suggested.
science	7	8. If you accidentally get some chemical or biological material in your mouth, you should...A. Swallow it and hope that it will not harm you. B. Joke about it with your friends. C. Rinse your mouth out with water and tell your teacher. D. Call for an ambulance to take you to hospital.
science	7	9.What is the best policy for safety in science class? A. Never touch electrical equipment as it can give you a shock. B. Understand the safety rules and follow them at all time. C. Only eat and deink when your teacher allows you to. D. Ask your partner to carry out any practical tasks.
science	7	Structure question 10.Imagine that you were asked by your teacher to give a talk on safety in science to a class of younger children, a) Write down three safety rules that you would choose to tell them. b)State how you would explain each rules to your audiences.
science	7	11. a) State the difference between the terms accident and hazards. B) 'An accident is something which just happens; it's no body's fault. ' Explain why this statement is incorrect.
science	7	Practical test question 12 Accidents can have unfortunate consequences. Describe an accident which could occur during a science lesson. What might the effects be?
science	7	Smoking: This is traditional method of drying fish in the smoke from wood fire. In Ghana, this is often done in a special oven known as the Chorkor Smoker. The heat and smoke reduce the water content, making it difficult for harmful fungi and bacteria to grow. Many people like the smoky taste. Salting: Cleaned fish is put in salt or strong salt solution for several hours; salt prevents the growth of bacteria and fungi.
science	7	Freezing: Fish can cooled in refrigerators to -20°C. Harmful organisms cannot grow. Canning: Fish is cooked and sealed in tins. The high temperature of cooking kills bacteria, Canned fish tend to be expensive. Care must be taken that the tins do not leak.
science	7	8. Which of the following is not a method of preserving fish? A. canning B. smoking C. marketing D. salting
science	7	11. Which of the following is not an advantage of freezing fish? A. It ensures that the fish remains fresh. B. The fish can be stored for long time. C. It imparts a good flavour to the fish. D. There is no loss in weight of fish.
science	7	Cigarette smoking damages the respiratory system, and can also lead to lung cancer, bronchitis, heart attacks and strokes, Poisonous carbon monoxide gas is inhaled with the smoke, and this decreases the amount of oxygen that can be carried by the blood. Cigarette smoking can also harm people that do not smoke. If people around them are smoking can also harm people that do not smoke. If people around them are smoking, they breath in the smoke and may get respiratory problems.
science	7	* Summary Smoking cigarettes can cause lung cancer, heart attacks and strokes.
science	8	micro-organisms: Tiny things that are too small to be seen with the naked eyes. Micro-organisms are sometimes called microbes or germs. Contaminate: To add an unwanted substance to something.
science	8	water-borne disease: A disease transmitted through water.
science	8	soap: A cleaning agent made from vegetable or animal fats. detergent: A cleaning agent made from organic by-products of oil refining.
science	8	Activity 1 What do you remember? Work in group to discuss the answers to these questions a. Where can you get water in your locality? b. Describe five different uses for water. c. Explain why water needs to filtered and boiled before drinking. d. Describe three different ways that water can become polluted, and how this pollution can be prevented. e. Describe the effects of polluted water on humans.
science	8	Sources of water Water is a vital substance for human beings. We drink it, we cook it , and we use it for cleaning.
science	8	Shallow wells are often contaminated with waste materials from nearby; the water form deeper wells and boreholes is usually safer to drink because no such impurities can reach the water.
science	8	Activity 2 Testing water a. Collect four samples of water from different sources. You will need about 200 cm^3 of each. Include rainwater and water from a well. You could also include from a stream or pond. b. Put each sample in a clean, labelled beaker. Keep these beakers in your classroom undisturbed for 24 hours. c. After 24 hours. observe each sample. are any solid particles settling at the bottom of the beaker? Record your observations. d. Label four pieces of filter paper to match your four samples. Filter each sample as shown in Fig3. Use a hand lens to observe any residue on the paper. e. Look at each filter. Describe its colour and smell. f. In the light of your observations, do you think that any of your filtrates are fit to drink? Take care! Don't taste the water-- it may contain harmful dissolved substances, or micro-organisms which have passed through the filter paper.
science	8	In Activity 2, you will have observed that water may contain solids impurities such as grains of sand or mud, and pieces of leaves or other living materials. Some sources may provide water with more impurities than others. Water may also contain dissolved substances with pas through filter paper. These may make the water coloured or give it a smell. The water we drink should be colourless, odourless and tasteless. It may still contain dissolved substances or harmful micro-organisms. It is a good idea to test the water supply from time to time, or to use purification tablets.
science	8	* Impurities may change the properties of water and may make it unfit to drink.
science	8	Objective questions 1. Which of the following sources of water is the safest for drinking? A. pond B. stream C. shallow well D, deep well 2. Water from a shallow well is not very suitable for drinking because it ...A. may have dead plant material in it. B. may be contaminated by nearby sewage. C. may have dead animal material in it. D. normally contains dissolved salts.
science	8	In this unit, you will learn about the processes of reproduction and growth in humans, the importance of good parental care, and the effects of teenage pregnancy.

science	8	If the labour is lasting so long that the mother cannot give birth by herself, the doctor may remove the baby by caesarean section. In this process the doctor removes the baby from the uterus through a surgical operation. Sometimes the baby may be delivered already dead from the uterus. This type of birth is called a still birth.
science	8	Immediately after birth, the baby begins to breathe in oxygen. The baby also starts sucks breast milk as food. The breast milk contains water, food nutrients and substances that protect the baby against diseases. Mother are now advised to feed their babies only on breast milk for the first six months. This is called exclusive breast-feeding.
science	8	Parental care before birth Sexual intercourse may cause pregnancy, and both parents must make sure that the foetus develops into healthy baby. During pregnancy, the father should make sure that the expectant mother has enough money for basic needs such as food, clothing and medication, and that the expectant mother and the developing baby are given proper medical care. The father should also support the woman, who may be feeling worried or stressed. The health and diet of the expectant mother can affect the growing foetus. A pregnant woman should: * eat a balance diet * rest sufficiently and do some body exercises * attend a pre-natal clinic regularly and take her medication * avoid drinking alcohol, smoking cigarettes or taking any narcotic drugs. * keep proper personal hygiene. * try to avoid stress of any form.
science	8	Learning objectives * Explain the importance of parental care after birth. * Outline the stages of development in humans.
science	8	When babies are born they can not do anything for themselves. Babies need a lot of care from their parents in order to grow successfully. Both the mother and the father have a duty to care for their children. As children get older they develop physically, mentally and emotionally. * Physical development means that their bodies grow bigger and stronger, and they learn to walk and to do things for themselves. * Mental development means learning to talk, and to understand what is happening around. * Emotional development means that they grow up happy and loving, and feeling safe and secure. Parents must help their children to develop in all these ways by: * providing them with a balance diet * providing them with somewhere to live * making the children feel secure by keeping them from harm, * giving them attention and love * education them both at home and at school *providing them with any medical care they need.
science	8	Infancy is the stage from birth to about 3 years, when the child needs a lot of attention. During this stage the child grows very fast, starts to grow teeth, and learns to talk, walk and run. Childhood is the next stage, from the age 4 to about 9years. The child is not grow as fast , but still needs a balance diet to grow well. The milk teeth fall out and permanent teeth grow,. Children learn values such as honesty, generosity and love at this stage , and they need help to understand things around them.
science	8	Summary *in infancy, children grow very fast and learn to walk and talk. * In childhood, children grow more slowly and get their permanent teeth.
science	8	Learning objectives * Explain the effects of teenage pregnancy * explain the dangers of indiscriminate sex.
science	8	Activity 5 The social effects of teenage pregnancy a. Work in groups. Discuss and list the ways in which teenage pregnancy affects the girl, the boy and society. b. Make a copy of the Futures Wheel in Fig. 11. and put five of your effects into it. c. Compare your Futures Wheel with those of your friends in other groups. d. Suggest ways of preventing teenage pregnancies.
science	8	Adolescents have sexual urge, but this must be controlled because of the dangers of teenage pregnancy or of sexually transmitted diseases like AIDS, gonorrhoea and syphilis.
science	8	Teenage pregnancy A teenage is a person whose age is between ten and nineteen years. Pregnancy within this period is described as teenage pregnancy. Even though girls develop breasts and start to produce eggs, their bodies are not developed enough to bear babies safely. A teenage girls may have an ectopic pregnancy, This is pregnancy where foetus develops in the fallopian tube instead of in the uterus. This can happen to adults, but it is more likely to happen to teenage girls because the fallopian tube is narrow, Ectopic pregnancies can cause death to the foetus and to the mother. A teenage girl's bones are still developing. A growing foetus can press against the pelvis and damage the growing bones. This can also lead to a very difficult and painful labour, which may be dangerous for the mother and the baby. A developing foetus needs lots of nourishment to help it grow. However, the body of a teenage girl is also growing, so the foetus has to compete for nourishment with the mother's body. As a result, the baby may be very small and underweight. Underweight babies are more likely to become ill. Teenage pregnancies can also have lasting effects on the teenage mother, teenage father and also the society. Teenage pregnancy affects the teenage mother and father, and may also affect their families. It is not good for a baby to have a teenage mother, as she may not be able to look after it properly. Teenage pregnancy also affects society.
science	8	Activity 6 Dangers of teenage pregnancy Talk to Community Health Nurse about teenage pregnancy and how it can be prevented.
science	8	Some of the effects of teenage pregnancy are listed below. * Ill health and death on the part of mother and baby. * Teenage mother may try to have an illegal abortion. * Teenage mothers drop out of schools. So they do not get a proper education and will not be able to support themselves or their baby. * Increasing in population. * Increase in number of street children, if the teenage parents cannot look after them. As teenagers are not physically and sexually mature and ready to become parents, the best method is to abstain from sexual activities.
science	8	Indiscriminate sex Some men and woman have many sexual partners. This practise is termed as having an indiscriminate sex life. There are many reasons why teenagers may do this. * Peer group pressure: their friends may encourage them to, or they may be influenced by what they see and hear about sex. *Lack of parental guidance: busy parents may not take much interest in what their children do. * financial status of parents: in poor homes, children may resort to indiscriminate sexual activities to get things they need. * Lack of sex education at home and school. *Weak morals.
science	8	If a woman has many sexual partners and she becomes pregnant, she may not know who the father is. She may not be happy to have the baby, and the father may not take responsibility. She may decide to have an illegal abortion, which could cause complications such as ill-health, barrenness, permanent deformities and death. If there is no father to help support the child, it may not get a good education and may end up as a street child. Someone with an indiscriminate sex life may catch transmitted disease(STD). Examples of such diseases are gonorrhoea,syyphilis, herpes, genital ulcers, urinary tract infection, and HIV/AIDS. There are many other such diseases not mentioned here. Even though some are curable, if not properly treated they can cause difficulties later. Some diseases, Like HIV/AIDS, cannot be cured and will result in death.
science	8	Summary *Teenage pregnancy are dangerous for the mother and the baby. * Teenage pregnancies cause social problems for the mother, baby and society.
science	8	An incriminate sex life can lead to unwanted pregnancies and sexually transmitted diseases, including AIDS.
science	8	Activity 7 incriminate sex a. Work in groups. Discuss and list the ways in which an incriminate sex life affects men and woman. b. Make a copy of the Futures Wheel in Fig12. and put five of your effects into it. c. Compare your Futures Wheel with those of your friends in other groups, and discuss your findings with your teacher.
science	8	6. The best method of preventing teenage pregnancy is to ... A. use a condom. B. study sex education at home. C. avoid having sex. D. have only one sexual partner.
science	8	c) List any three signs that will be shown during the first three months of pregnancy. D) State one responsibility of: i) the mother before birth ii) the father after birth

science	8	13. a)State any two effects of teenage pregnancy. b) i)What do we mean by an indiscriminate sex life? Ii) List any two sexually transmitted diseases.
science	8	Food preservation Food turns bad when bacteria grow on it. Food can be preserved in different ways that stop bacteria growing.
science	8	Kwashiorkor When young children do not have enough protein in their diet they do not grow well. They usually develop a big, round stomach. Their arms and legs get very thin and their body is small and weak. They also have diarrhoea. Kwashiorkor is a word used by the Ga people of Ghana to mean 'the sickness the old baby gets when the new baby comes. Kwashiorkor can be prevented by feeding young children with a balanced diet that contains enough protein. This can be done by giving them porridges made from millet, sorghum and Guinea corn.
science	8	Rickets is found mainly in children. It is caused by the absence of vitamin D in their diet. Rickets causes the bones to become soft and curved, with swollen ends. The chest and shoulders also appear to be curves, giving rise to a condition known as pigeon-chest. Rickets can be prevented by providing foods rich in Vitamin D. Examples of such foods are milk, liver, cod-liver oil, egg yolk, shrimps, crabs and lobster.
science	8	Activity 6 The importance of food substances Working in groups to discuss the answer these questions. a. Why do you think that parents and older children often have bigger portions of meat or fish? b. Why do the children need more protein? c. What would you say to the parents to persuade them to give their children more protein? d. Which protein is the cheapest in the market today? GHNANA WEEKLY HEALTH NEWS CHILDREN MUST EAT MORE PROTEIN It has been observed from a number of surveys that in most families the father, mother and older children get the bigger portion of meat or fish when food is served. The younger children are given only small portions. Children and young people who re growing up need a lot of protein is provided by foods such as meat, fish, eggs and beans. Pregnant woman who carry growing babies in them also need a lot of protein.
science	8	4. Which of the following food groups is required for growth and repair of tissue? A. fats and oils B. carbohydrates C. Vitamins D. Proteins
science	8	Kwashiorkor is a deficiency disease caused by lack of … A. protein. B. vitamin C. C. vitamin D. D iodine
science	8	The people who make these illegal electrical connections are not trained electrical engineers, and my not make proper, safe connections. This can lead to fire outbreaks, and damage to the electrical equipment.
science	8	Illegal electrical connections can cause voltage drops and power cuts, fires and damage to electrical appliances, and reduce government revenues.
science	8	12 a) Give two reasons why the demand for electricity in Ghana is increasing? b) why is it dangerous to make an illegal connection to the electricity supply? c) Give two other reasons why people should not make illegal connections.
science	8	In primary school, learnt about parts of the body and how to care for it. You also learnt about different ways of disposing of solid and liquid waste, and the importance of keeping your surroundings clean.
science	8	You learnt about malaria, which is caused by a parasite, and about diarrhoea.
science	8	Activity 1 What do you remember? Work in groups to discuss the answers to these questions. a. How does malaria spread, and how can it be prevented?
science	8	b. What is diarrhoea, and how can it be prevented?
science	8	c. What is AIDS, and how can it be prevented?
science	8	Children can be vaccinated to stop them getting measles, and healthy people should avoid contact with patients or their clothing and other personal items.
science	8	AIDS is a disease caused by the human immunodeficiency virus(HIV). It weakens the body's defences against disease, and infected people easily get other infections such as pneumonia, TB or skin cancer. There is no known cure for AIDS yet. The virus can be spread by sexual intercourse, or by coming into contact with contaminated blood through sharing needles or razor blades, or by being given a blood transfusion in which the blood is contaminated with HIV. An infected mother can pass the virus on to her unborn baby. AIDS can be avoided by having sex with only one partner, screening blood before transfusions, and by not sharing needles or razor blades with other people.
science	8	Activity 2 AIDS posters Make a poster with a message to tell people how they can stop the spread of AIDS.
science	8	Some diseases can only be prevented by vaccination.
science	8	Contaminate food and water can cause diseases. Some diseases, such at typhoid, cholera, and dysentery, are caused when you eat or drink contaminated food or water. Other diseases, such as bilharzia (blood fluke) and guinea worm (Dranunculiasis), are caused when parasites that live in the water get into your body through the skin. Food may become contaminated if it is left uncover and flies carrying germs settle onto it. Handling food with dirty hands or eating from a dirty plate can also cause food contamination. Water may be contaminated by bacteria from sewage or other waste. Typhoid is caused by a bacterium, You can be infected by eating contaminated food or drinking water. Typhoid is common during the rainy seasons in Ghana. The refuse that has collected in gutters and elsewhere gets washed into rivers and streams which therefore become contaminated. Sometimes food sold close to refuse dumps or toilets can become contaminated by flies carrying the bacteria.
science	8	Cholera is a water-borne disease caused by a bacterium. A person suffering from cholera has severe diarrhoea with 'rice water' stools, vomiting and cramps.
science	8	Vaccinations can be given to help prevent cholera, but they only give protection for 6 to 12 months, and do not work very well.
science	8	Dysentery is caused by contaminated food or water, and patients have severe diarrhoea, which contain blood.
science	8	Preventing diseases that are passed on through contaminated food or drinking water can be prevented by treating drinking water, and by proper disposal of sewage and refuse so that they do not contaminate water. Food should be prepared properly, and only treated water should be used to wash fruits and vegetables. Food, cooking utensils, and plates. cups and spoons should be kept away from flies.
science	8	Activity 4 Preventing diseases: a Form small groups in your school to keep the compound clean as well as your drinking water.

science	8	Immunisation: We prevent our bodies getting a disease by immunisation or vaccination. In immunisation or vaccination a small amount of killed or weakened germ is injected into a healthy person. The person's immune system responds to this introduction and produces antibodies. If germs then enter the body, the antibodies are already prepared to help to kill them. We need a different immunisation for each disease.
science	8	c. Discuss the causes, treatment and prevention of communicable diseases with your friends at home and organise a regular cleaning exercise in your area.
science	8	Summary Some diseases such as typhoid , cholera and dysentery, are caused by contaminated food or drinking water. These diseases can be prevented by treating drinking water, and by preparing food properly.
science	8	7. Which of these cannot pass on the HIV virus? A. Sharing a razor blade with am infected person. B. Having sex with an infected person. C. Shaking hands with an infected person. D. Sharing a needle for injection.
science	8	10. Which of the following is not a water-borne disease? A. cholera B. typhoid C. tuberculosis D. bilharzia
science	8	Learning objectives * Describe some diseases caused by water-borne parasites.* Explain how these diseases can be prevented.
science	8	You can get bilharzia by bathing and washing in ponds and rivers contaminated with urine and faeces containing the fluke's eggs.
science	8	Toilet facilities should be provides in schools and in every home or community, so that people do not need to urinate or pour faeces into rivers or ponds, which is how the flukes get passed on.
science	8	The risk of skin infections can be reduced or prevented by washing the body regularly with soap to keep the skin clean. Washing also prevents the bacteria from multiplying. In addition the skin naturally produces a chemical which kills some of the harmful bacteria. when the skin is nor kept clean, it may become infected.
science	8	* Guinea worm can be controlled by treating water. * Some diseases affect the skin. These can often be controlled by keeping the skin clean and dry, but some need special creams or medicine.
science	8	Diseases and cause: Scabies Caused by the itch mite (a tiny animal)-- Precautions/prevention: Always wash the body thoroughly with soap.
science	8	Diseases and cause: Foot rot Caused by a fungus -- Precautions/prevention: Dry shoes in the sun after use. Use clean, dry socks. Wipe in between toes thoroughly after bathing.
science	8	Diseases and cause: Yaws Caused by bacteria -- Precautions/prevention: Wash the body thoroughly. Treatment is with antibiotics.
science	8	2. All of these can cause guinea worm disease except: A. boiling and filtering drinking water B. Filtering drinking water only C. Drinking untreated water D. bathing in river or ponds
science	8	c) How can proper disposal of sewage help to control bilharzia?
science	9	You should see from the pictures that acids can be useful or harmful. Base can also be useful or harmful. Concentrated acids and bases are said to be corrosive. That is, they attack and destroy some objects, including the skin and clothes. You should therefore be very careful when working with any of tem, and never pour an acid or a base onto another person.
science	9	Caution: Sodium hydroxide solution and hydrochloric acid are corrosive.
science	9	Learning objectives * Describes the symptoms of malaria * List ways of controlling malaria
science	9	Fig.5 This child in Tanzania is being given an experimental anti-malaria vaccine.
science	9	There are several diseases which can be transmitted by mosquitoes, These include malaria, dengue fever and West Nile disease. In Ghana, the most important mosquito-transmitted disease is malaria, which is transmitted by the Anopheles mosquito.
science	9	Malaria is a disease caused by a parasite, a single-celled animal which attacks red blood cells. It is carried by some mosquitoes and transferred to animals when it bites them. If a mosquitoes is not carrying the parasite. It may become infected when it sucks blood. Later, when it bites another animal. it first injects saliva into the animal. This saliva transfers the malaria parasite so that the new animal is infected. The mosquito is called the "malaria vector".
science	9	Malaria symptoms and treatment Someone suffering from malaria experience fever and nausea. The liver, kidneys, blood and brain may be affected, and in severe cases, the suffer may die.
science	9	Patients with malaria may be treated wit drugs based on quinine or artemisinin, but these are expensive and in some areas the malaria parasite is becoming resistant to them. Some people who live in areas where malaria is common may themselves develop resistance to the parasite.
science	9	At present, there is no satisfactory vaccine which can be used to immunise people against malaria. However, many groups of research scientists around the world are working to develop a vaccine and they are beginning to have success. Future generations may live their lives free from the worry of malaria.
science	9	An effective vaccine against malaria has been developed and could be licensed by 2010, scientists say. The vaccine was used to protect 2,022 children in Mozambique and cut the risk of developing sever malaria by 58%. Lead research Professor Pedro Alonso said:' these are clearly the best results we have ever seen. We are quite certain not only that the vaccine is safe, but that we have seen a clear efficacy.' The team tested the trial vaccine on children aged between one and four years old in Mozambique, where malarias is widespread, Globally, over one million people, many of them children under the age of five, die from malaria each year.
science	9	Controlling mosquitoes: Mosquitoes need standing water in which to lay their eggs and where the larvae and pupae can develop. Households can ensure that there is no open water around their homes: Cover water tanks so that mosquitoes can not get in , and empty containers such as old tyres or tanks which may contain rain water. Many mosquitoes breed in marches: these can be drained, or more simply trenches can be dug around marshland so that there is a flow of water, and so that fishes such as carp can swim in and eat the larvae. Another approach is to pour oil on the surface of water. The mosquito larvae and pupae cannot then push their breathing tubes up into the air and so they die from lack of oxygen. These approaches are described as environmental control.
	9	Another approach is to introduce natural predators of mosquitoes. The most effective is to introduce fish such as guppies which will eat the eggs, larvae and pupae. Other types of biological control have been tried, but with less success. Scientists study the natural predators and diseases of mosquitoes in the hope of finding some other way to control them.

	9	Insecticides are often used to kill mosquitoes at all stages of their life cycle, and particularly when they are adults. This is chemical control. Large areas of ground may be sprayed with insecticides such as DDT (although this is known to be harmful to many other creatures). People can avoid being bitten at night by sleeping under a mosquito net which is impregnated with an insecticide such as permethrin. In Ghana, this is done more in rural areas than in towns, although town-dwellers also need the protection.
	9	In generic control, mosqitoes have been developed with a factor which makes female mosquitoes die. Modified males are released into the environment where they mate with females. Any female offspring die when they are young, thus reducing their chances of biting any prey.
science	9	Summary * Mosquitoes transmit several different diseases, including malaria. *Understanding the life cycle of the mosquito allows us to control the transmission of malaria.
science	9	6. Covering the surface of a pool water with oil to prevent malaria from breeding is an example of: A. genetic control B. environmental control C. chemical control D. biological control
science	9	7. Which of the following is not a disease transmitted by mosquitoes? A. malaria B. dengue fever C. HIV/AIDS D. West Nile disease
science	9	8. The mosquito transmits malaria to humans. This means that the mosquito is the A. parasite B. infection C. vector D. vaccine
science	9	b) At which stage can the mosquito infect a mammal with the malaria parasite? c) Explain how the malaria parasite is transferred to the mammal which is bitten.
science	9	Activity 1 What do you remember? Work in group to discuss the answers to these questions a. When does a baby start getting teeth? b. At what ages did you lose the first and last of your milk teeth? c. How do you look after your teeth?
science	9	Tooth dacay: Tooth decay is usually caused by food particles left in between the teeth. Bacteria in the mouth act on the pieces of food and convert them to acid which dissolves away the enamel and creates a hole in the tooth. If the hole gets big enough the nerves are exposed and the tooth hurts. If nothing is done about it, the tooth becomes very weak and eventually falls out. There problemscan be prevented or controlled if the teeth are clearned regularly with water after a meal or after drinking sugary drinks. the mouth is washed vigrously with water after a meal or after drinking sugary drinks. the dentist is visited at least once every six months, so any small holes can be filled before they grow too big.
science	9	1. What name is given to a child's first teeth? A. fairy teeth B. water teeth C. baby teeth D. milk teeth
science	9	Activity 1 What do you remember? Work in group to discuss the answers to these questions a. List several methods of processing food. Why does food need to be processed?
science	9	Improved healthcare has helped to reduce the number of woman who die when giving birth, and also the number of babies that die when they are very young.
science	9	In areas, where there are no community health nurses, there are trained traditional birth attendants(TBAs) who attend to pregnant woman.
science	9	Another area where there has been recent improvement is in providing mosquito nets which not only keep mosquitoes out but also kill them. This has reduced the death rate from malaria.
science	9	Improved healthcare means that most people are now aware that eating habits and exercise can affect their health, and they are aware of how they can avoid diseases such as HIV/AIDS,
science	9	Improved toilet facilities in people's home and communities include the Kumasi Ventilated Improved Pit-Latrine (KVIP), cesspits and water closets (WCs).
science	9	Activity 3 Traditional cultural practices a. Work in groups. Discuss the traditional means of carrying out the following activities:*eating *farming *sanitation *healthcare *food processing *education b. Discuss how each of these activities could be charged by modern technology. Some of the pictures in Fig.7 may help you. c. Compare your conclusions with other groups, and discuss them wit your teacher. Fig. 7 Some modern ways of living
science	9	3. How has technology improved sanitation? A. more rubbish dumps B. more waste put into rivers C. more recycling of waste D more people defecate in streams
science	9	7. Which of the following is not a product of technology? A. satellite telephones B. the Internet C. chemical fertilisers D. the malaria parasite
science	9	Machinery can be hazardous--people need to know how to operate it correctly.
science	9	In Ghana, two bodies work to ensure that food is produced to a high standard of safety and quality: * The Food and Drugs Board, set up in1997 under the Minister of Health, inspects producers and processors, and helps producers to understand how they can meet the standards that it sets. * The Ghana Standards Boards, set up in 1967, has laboratories where foods can be tested to check their nutritional content and to see if they are contaminated and with harmful microbes.
science	4	Caution: Some plants are poisonous while others may irritate the skin. Others have thorns on them and must be handled carefully.
science	4	Pets must be treated promptly by animal doctors when they are sick. They also need deworming and regular vaccination to prevent dangerous diseases like rabies, distemper and infuenza in cat.
science	4	we do not want electricity to leak out of wires. It can kill. We cover wires in our homes with plastic or rubber.
science	4	Activity 3.8 Finding out the strength of metals. Caution: Be careful you do not hurt yourself.
science	4	Caution: Working with metals can be dangerous, so be careful.
science	4	Plastic is also used to cover electric wires to prevent electricity from leaking out.
science	4	Caution: Be careful! Being cut by a rusty metal can give you tetanus.
science	4	Caution: Be careful! Hot water and steam can hurt.
science	4	3. Light a mosquito coil.(If you do not have a mosquito coil you must use something else to make smoke. (Your teacher will decide how to do this safely)

science	4	Ecercises 4. Smoking cigarettes harms the person who smokes. It also harms other people in the same house. Why is so?
science	4	3. Write true or false for each statement: b) Mosquito netting prevents ventilation.
science	4	Activity 3.1: Finding our why our skin itch: 1. Look at any itchy patches on your skin. 2. If you have an itchy head, ask your friend to look at it. Ask your friend to describe the itchy part. 3. Can you say what has caused the itching?
		Ringworm is a disese caused by a tiny organism called Tinea. It spreads through body contat with an infected person or through using articles like comb used by an infected person. Ringworm causes itching and loss of sleep.
		Scabies is caused by a small animal called skabies mite or itch mite. It makes holes between toes and fingers. Small pomples produced by the imte causes itching.
science	4	Measles is a very serious airboene disease caused by virus. It is usually spread through sneezing and coughing y infected persons. The disease causes rashes, fever and itching. Most people are infected by measles in childhood. It is one of the six killer diseases. It can be prevented by vaccination.
science	4	5.3.2 Prevention of skin diseases 1. Washing the body always Wash the body everyday with clean water and soap to remove sweat and dirt. This prevents some agents of skin diseases (e.g., Tinea and itch mite from living on the skin. Washing also removes some other things that cause itching.
science	4	2. Practising good personal hygiene Wash your garments like vest, pants and socks with clean water and soap. Hang them on drying line and not spread on the ground. This prevents diseases and other substances which cause skin irritation from hiding in them. Iron your garments to kill agents of skin diseases.
science	4	Keeping the hair clean It is important to keep the hair clean always. You can do this by washing and combing it daily. Untidy hair may harbour little insects called head lice. D not share combs with other people as this helps to spread head lice like Ghana. it is advisable to keep your hair short. This makes it easy to take care of.
science	4	4. Disinfecting stadiums and gymnasiums Changing rooms in stadium and gymnasiums should be disinfected regularly. This makes our sportsmen and women strong and healthy.
science	4	5. Disinfection public toilets and bathrooms Public toilets and bathrooms should be disinfected regularly to destroy agents of skin diseases.
science	4	6.Vaccination People should be vaccinated against diseases. Including measles and chickenpox.
science	4	7. Communal towel It is advised not to use communal towels as these can become easily infected.
science	4	Excercises: c. wWashing the body everyday removes _____ and dirt. 3. Why shold you wash your body with soap and water?
science	5	Caution: The juice of some plants may cause itching of the skin.
science	5	Warning: Do not eat flowers unless you know it is safe. Some flowers are poisonous.
science	5	Caution: Steam can burn severely!
science	5	Caution: Do not look directly at the sun or its reflection in the mirror
science	5	Caution: heat can hurt! be careful.
science	5	Caution: Steam can burn severely!
science	5	Caution: Steam can burn severely!
science	5	Caution: Do not inhale the gas produced.
science	5	Caution: Steam scalds, so be careful.
science	5	Water related disease: 5.3.1 a) Symptoms of malaria: 1. At first you may feel cold, weak and aching. 2. Then you become hot. We say that you have a fever. The fever may last several hours. You may have other symptoms such as headache and dizziness. 3. Then you sweat. The fever becomes less. The fever comes back every two or three days until the malaria is cures. Malaria is a dangerous disease. Is can kill if it is not treated.
	5	5.3.2. Prevention of malaria. 1. Weed your surroundings regularly. Bury empty tins and broken pots. Drain stagnant water. Clear blocked gutters and bushy areas. Clear blocked gutters and bushy areas. These are part of good sanitation that you have to practise. 2. Kill mosquitoes: Use insect spray to kill adult mosquitoes. Pour oil on the surface of stagnant water. This stops larvae and pupae from breathing. It kills them. 3. Stop mosquitoes from biting you: Sleep under a mosquito net treated with special medicine such as deltamethrin. Wear a long-sleeved shirt, long troussers and socks in the evening. This prevents bites on arms and legs. Spray the room with insecticide or burn mosquito coils at night. Rub anti-mosquito cream on your body. Mosquitoes do not like to bite skin covered with this cream. Cover windows with mosquitoes mesh. 4. Take drugs against malaria.: Some drugs can prevent malaria. Some drugs treat malaria and kill the parasite called plasmodium in the blood. This prevents malaria spreading to other people.
science	5	b) Sysmtoms of Cholera: When our stools are loose and watery we way we have diarrhoea. Cholera starts with diarrhoea and vomitting. There are also pains in the abdomen. The stools lose their useful colour and look like milk or rice-water. Because of frequent defecation and vomitting, there is loss of body fluid. The patient is said to suffer from severe dehydration. There is great loss of weight.
science	5	c) Symptoms of Guinea worm: Guinea worm disease starts with a small, itchy patch of swelling called a blister. This may appear on any part of the body. It is usually found in the lower leg. The blister later bursts to form a painful wound or ulcer. Other germs may enter the wound to produce pus. This is followed by vomitting, diarrhoea and asthma. There is dizziness. Faintin may occur.
science	5	b) Prevention of cholera: Cholera is caused by a germ called cholera bacteria. It is usually spread through water, faeces and by flies. We must, therefore, practise god hygiene to keep flies and faeces away from food and water. People suffering from cholera are to be treated and cared for promptly in specila clinics and hospitals. This will prevent the spread of the disease. Wash your hands with water and soap after visiting the toilet or latrine and before touching food. Always cover food to keep flies away. Keep your homes and surrondings clean to keep flies away. Go to the nearest hospital or clini if you detect symptoms of cholera for prompt treatment. There should be proper dispossal of faeces in your locality. Get vaccinated whenever there is cholera outbreak in your locality.

science	5	Prvention of Guinea worm: 1. Guinea worm lives in cyclops. People should, therefore, avoid contaminatin wells, punds, and rivers supplying drinking water in areas where gyclops live. 2. Filter water with muslin or cotton material cyclops is fairly large and cannot pass through these materials. 3. Boil water before drinking to kill cylops. 4. Introduce a fish of the barbel family to feed on the cyclops. People suffering from Guinea worm disease should be banned from washing, swimming or bathing in streams and rivers providing drinking water. Step wells are wells approached by descending wteps. These wells are often used in dry seasons when water is scarce. Step wells should be banned as a source of drining water. Guinea worms from infected wounds easily get into the well.
science	5	5.4.1 Causes of HIV/AIDS AIDS is Acquired Immune Deficiency Syndrome. It is a disease caused by infection with Human Immunodeficiency Virus (HIV). It is transmitted in blood, semen or vaginal fluids. It destroys the immune system of humans and leaves the body open to attack by infections.
science	5	Meaning of AIDS A stands for Acquired or got. I stands for immune protected against. D stands for Deficiency or lack of something. S stands for Syndrome or a group of signs. Therefore, people with AIDS have signs which show that system which protects them against diseases is no longer working well.
science	5	Meaning of AIDS A stands for Acquired or got. I stands for immune or protected against. D stands for Deficiency or lack of something. S stands for Syndrome or a group of signs. Therefore, people with AIDS have signs which show that system which protects them against diseases is no longer working well.
science	5	Meaning of HIV H stands for Human I stand for Immunodeficiency or damage to the immune system. V stands for virus, which is a kind of germ that causes the disease. There, HIV is a virus that damage a person's immune system and causes AIDS. AIDS is caused by infection with human immunodeficiency virus (HIV)
science	5	for diseases to attack the person. The person's body cannot longer fight disease. A person infected with HIV is HIV positive. An HIV positive person can pass on the virus to other people. After a person gets HIV, It takes some time for the signs to appear. It may take 2 to 12 years in an adult, but takes only about 1 to 3 years in a baby. Ehen the signs of disease appear. it means that the person is suffering from AIDS. Fig. 4.2. HIV/AIDS in adults
science	5	5.4.2 Effects of HIV/AIDS HIV and AIDS have caused a lot of human suffering and a result of death and illness.
science	5	HIV is spread mainly through sexual intercourse. The best way of avoiding HIV/AIDS is not to have sex before you are old enough. Older people should be with one partner only. We should talk about AIDS with our family and sexual partner. There are medicines which help to prevent HIV passing from mothers to a baby. Woman who are pregnant should ask a health worker for advice.
science	5	We can avoid spreading HIV through infected blood. Medical instruments such as syringes must be sterilized after use. This them safe. Health services must screen (check) all blood from donors. We must avoid practices which may spread HIV. Such practices as using unsterilized equipment for tattooing and ear piercing. We should not share blades or toothbrushes. AIDS has no cure. We must prevent it from spreading.
science	5	5.4.4 It is safe to live freely with HIV/AIDS patients People who are HIV positive may live many years before they become ill. During this time, they can live full and useful life. They should behave in a way that does not put other people at risk. You should treat people with HIV/AIDS with the same respect and care as others. People with AIDS are not dangerous. You cannot get the virus from talking or sitting next to someone with AIDS. People with AIDS need compassion and support. It is safe to live with HIV/AIDS patients. People with AIDS are not dangerous. They need your support and compassion.
science	5	Exercises 1. Why is it safe to live freely with people with HIV/AIDS? 2. Describes three ways of preventing the spread of AIDS. 3. What is the best way of avoiding HIV/AIDS in children like you? 4. List the effect of HIV/AIDS on the family? 5. Describe ways of preventing the spread of HIV/AIDS.
science	5	Project: In a group make a poster about HIV/AIDS to educate people about the causes, effects and prevention of the disease. Present it to the rest of the class.
science	5	Assessment questions 1. State one effect of HIV/AIDS on each of the following: a) children B0 food production c) teachers 2. How can a healthy person avoid getting HIV/AIDS? 3. State two methods of transmission of HIV. 4. What is AIDS? Write the meaning for each letter. 5. What is HIV? Write the meaning for each letter.
science	6	Caution: Candle can burn!
science	6	Anopheles is a type of mosquito. The female anopheles mosquito feeds on human blood, and it transmits malaria.
science	6	Caution: Heat can burn!
science	6	Caution: handle hot metal ball with tongs.
science	6	Caution: Steam scalds!
science	6	Caution: Use a tong to hold the hot metal.
science	6	Caution: Do not touch chemicals
science	6	Caution: Heat can burn!
science	6	Warning! In some activities in this book you have handled bare electric wire. You could do this because were using circuits with dry cells. Three dry cells do not produce enough electricity to hurt you. However, the electricity in our homes may come from generators or the mains power supply (electricity supplied by electricity companies). these sources give much more electrical energy. They can be very dangerous. They can give us electric shocks. If appliances are connected to generators or the mains supply: * never touch or step on a bare electric wore * never touch bare wires with metals that are not insulated * never take the appliances into wet places such as bathrooms.
science	6	Germs get onto food from the air, from houses flies and other animals, and from dirty fingers. The germs grow on the food and make it bad. Substances inside food may also make the food rot after some time. The rotten food may smell bad and become unsafe to eat.
science	6	Usually, canning and bottling is done in factories. The food is heated to kill germs. The cans and bottles are also heated to kill the germs in them. The food is put in the cans or bottles. Substances which stop herms from growing are added. The can an bottles are sealed. This stops air from reaching the food.
science	6	We add a lot of sugar to fruit and boil the mixture. We then pour it into clean jars with clean lids. If there is enough sugar, germs cannot grow in the jam. Caution: Cover the bottles tightly. Mould can grow on jam of bottle is not air tight.

science	6	Germs cannot grow easily in salted food.
science	6	Germs cannot grow easily in brine or vinegar.
science	6	Not all germs are killed by freezing, but they cannot multiply at this temperature. We can freeze cooked and uncooked foods. When you take food out of a deep freezer, you should leave it to thaw (for the ice in it to melt) before cooking it. When it has thawed you must not freeze it again.
science	6	5.2.1 Causes of food poisoning Fig. Animals making unsafe Study the drawings in Figure 2.1. Describe what you see in each one. Is it safe to eat each of the food shown? Explain your answers. Pests like mice, houseflies, and cockroaches can carry germs onto food. These germs can make the food go bad. Germs in the air and on dirty hands and dirty cooking utensils are also carried onto food.
science	6	Fig. 2.2 Unsafe canned food Study the drawings in Figure 2.2. *When food is canned, an expiry date is written on the can. An expiry date is the date after which canned or bottled food, medicine, or drink is not safe to use, What is the expiry date on the can of tuna in Figure 2.2(a)? Is this food safe to eat? *What can you see on the lid in Figure 2.2(b)? Is this food safe to eat? +What has happened to the can of milk in Figure 2.2(c)/ Is this milk safe to drink? All the food in Figures 2.1 and 2.2 may have gone bad. Eating food which has gone bad can cause an illness called food poisoning.
science	6	Germs on food All food can cause food poisoning g if germs get onto it. These include: * foods which have not been preserved * foods which have been badly preserved, especially protein foods such as meat, fish and milk. Food preservation should be done in very clean conditions. People handle food in homes an d in factories. All these people must keep their hands clean, They must also keep their utensils and surroundings clean, The water used in food preservation must be safe to use. Water can be made dirty by animals, dirty containers, and waste materials. Boiling usually makes water safe to use.
science	6	You may see mould growing on the fruit. (Mould is a living thing that grows on many spoiled food. It is often green or white.) The fruit may also smell bad. It is not safe to eat. Caution: Do not touch mouldy food.
science	6	Food in cans and bottles can go bad. If it is too old it may have gone bad.
science	6	Activity 2.2 Checking expiry dates 1. Collect ten canned and bottled foods. 2.Check their expiry dates. Do not eat any foods which are past their date. * Always check expiry date when you buy canned and bottled foods. * If the top of a can is puffed out, the food in it is not safe. Do not eat it. * Sometimes the inside surface of a can is rusty. Air has entered the can and spoiled the food. Do not eat it. * Sometimes the inside surface of a can is rusty. Air has entered the can and spoiled the food. do not eat it. * Never leave an open can partly full of food. Instead, put the food in a bowl and use it before it goes bad. The food will quickly go bad in an open can.
science	6	5.2.2 Signs of food poisoning Look at the can of tuna in Figure 2.4 What do you see? Give two reasons why it is not safe for the boy to eat the tuna. What is happening to the boy after eating the tuna? Fig. 2.4: Getting food poisoning
science	6	Food posoning is bery unpleasant and can be dangerous. These are some common signs of food posoning. Acute stomach parin. Vomitting. A sudden increase in body temperature. Frequequent passing of watery faeces(Diarrhoea), If food poisoning is severe, the person should see a health worker.
science	6	Exercises 1. List three causes of food poisoning.
science	6	3. You are preparing a meal for a family. Describe the meal you will prepare. Describe how you will make sure it is safe to eat. 4. How would you identify an expired food product?
science	6	Assessment questions State whether each of the following statements is true or false. 1. It is good to eat food with mould growing on it. 2. Faeces can contaminate food. 3. Food which is badly preserved can cause food poisoning . 4. It is good to leave a half-full can of food in the refrigerator. 5. It is not safe to ear food if its expiry date has passed. 6. Dirty hands and utensils can be a source of food poisoning. 7. Animal droppings cannot harm humans. 8. Food poisoning can be unpleasant. 9. A canned food with the lid puffed up is likely to cause food poisoning when eaten.
science	6	Floods may help to spread diseases such as cholera and typhoid fever. This happens because of broken sewage systems and polluted water supplies. It may be difficult for people to boil drinking water when there is a flood.
Technological Education	7	Each amino-acid has its own chemical name. There are twenty-two of them, ten of which are called essential amino-acids. The remaining twelve are not they can be produced by the body. Adults need eight of these but children and toddlers need all of them.
Technological Education	7	From the function mentioned, it is clear that even though we need proteins all the time, certain groups of people need it more than others. The following shows the categories of people who need more proteins than others. Babies and children require a lot of protein as they grow rapidly. Adolescents require protein to support their rapid growth. Pregnant women require more than normal to cater for the growing baby. Nursing mothers require more than normal for milk production during beast-feeding.
Technological Education	7	DEFICIENCY If there is lack of quality protein in the diet of children, they will not grow properly and they may be affected by disease called Kwashiorkor.
Technological Education	7	How to treat KWASHIKOR -A child who has Kwashiorkor should be given a lot of protein foods eg. Meat, fish, milk, soybeans, groundnut and aqushi.
Technological Education	7	FUNCTIONS OF VITAMIN A They * promote growth in children * Promote good growth and health
Technological Education	7	Deficiency * Lack of vitamin A may cause poor vision (night blindness) * Poor growth in children.
Technological Education	7	Children are now being given vitamin "A' supplement to aid their growth, by public health nurses.
Technological Education	7	A disease known as rickets is caused, where bones are not well formed. The bones are either curved or bowed resulting in a disease known as rickets in children.
Technological Education	7	FUNCTION OF VITAMIN E It * helps to improve fertility in females

Technological Education	7	(vitamin E) DEFICIENCY * prematured babies and people who cannot absorb fat may show signs of an increased breakdown or red blood cells and muscle tissue damage.
Technological Education	7	(vitamin B) FUNCTION *It is necessary for normal growth in children
Technological Education	7	DEFICIENCY Lack of vitamin B * Retards growth in children
Technological Education	7	(vitamin B2) FUNCTIONS * It promotes growth in children. DEFICIENCY * Growth in children is impaired
Technological Education	7	(calcium) DEFICIENCY * In children , bones and teeth are not formed properly.
Technological Education	7	REASONS FOR PRESERVING FOOD 8. To prevent micro organism from contaminating the food.
Technological Education	7	REASONS FOR COOKING FOOD 1. To kill micro-organisms present in the food. 2. To preserve the food from natural decay 3. To destroy natural poisons (toxic) in foods
Technological Education	7	POINTS TO CONSIDER WHEN STEAMING -The water for steaming is kept boiling before food is put into avoid uncooked food.
Technological Education	7	TIPS FOR TABLE LAYING i. use a clean and proper ironed tablecloth and napkins.(serviette)
Technological Education	7	When placing cutlery on a table, do not touch areas that will be touched by the food , eg; hold the handles of forks and knife rather than the tines and blades.
Technological Education	7	Situation 3 The pupils' sleeping structures in the dormitories of most boarding schools are made so high that, it is difficult for pupils sleeping on top structures to climb and descend thereby falling down and getting injured. More so there are no preventive measures to restrain pupil from falling whilst asleep. Sometimes ascending and ascending the sleeping structures disturb those pupils sleeping underneath thereby causing inconveniences to them.
Technological Education	7	(a) Identifying four problems in the scene provided.
Technological Education	7	6. choose suitable methods to preserve specific food commodities
Technological Education	7	High standard of cleanliness and sanitation should be practised in the kitchen in order to avoid food contamination . A good carter must be able to keep his/herself, the foods an environment clean.
Technological Education	7	The need to stay healthy as a caterer * Maintain clean environment.
Technological Education	7	Good hygiene can be grouped under three main three main headings. * Personal hygiene 1. Bath twice day to get rid of germs, dirt and sweat or to prevent bad ordour.2. Use clean cloths, apron and cover hair with net or scarf when cooking, to prevent hair from falling into the food.3.Wash hands with soap and clean water before handling food and after visiting the toilet. 4. Keep finger nails short and clean 5. Sneeze or cough away from food into a handkerchief. 6.The teeth should be brushed twice a day 7. Spiting must not be encouraged in the food preparing area.8. Cover cuts and sores with appropriate dressing when cooking. 9. Keep your hands from nostrils and hair when cooking.
Technological Education	7	Food hygiene 1. Buy foodstuffs from a clean environment. 2. Buy only wholesome foodstuff. 3. Avoid buying dented or swollen canned foods. 4. Food should be stored properly. 5. Cover cooked food with good lid. 7. Preserved left over food well. 8. Use clean water for cooking. 9. Food should not be sold near refuse dumps, dirty drains and toilets. 10. Cooked food must be kept and sold in fly-proof cage.
Technological Education	7	Kitchen hygiene 1. Keep all working surfaces clean at all times. 2. Keep utensils clean and well stored when not in use. 3. Sweep the floor and scrub it regularly. 4. Empty the dustbin after each session of cooking. Keep it covered at all times. 5. net should be used to cover windows and doors of the kitchen to prevent flies and insects from entering the kitchen. 6. Windows should be opened to allow good lighting and ventilation. 7.Wrape up waste before dropping into dustbin. 8. Wrap up spills as they occurs. 9. Use a clean dust cloth, tea towels an other kitchen cloths, wash them regularly and dry in the sun. 10. Avoid using kitchen cloth as handkerchief. 11. Keep the fire place, stove or cooker clean after each use. 12. Use only clean utensils for preparing, cooking and serving food.
Technological Education	7	Bacteria: Bacteria that cause food spolage are called pathogen.
Technological Education	7	5. to prevent micro-organism s from contaminating the food, once it is preserved by sealing it from the outside air.
Technological Education	7	Causes of kitchen and workshop accidents: All types of accidents in the kitchen are caused by the fundamental things which are: a) Excessive haste, b) Distraction, c) Failure to apply safety tules, d) Fire explosion, e) Using faulty equipment, f) Wet and slippery floors, g) Insufficient lighting and ventilation, h) Tiredness and carelessness.
	7	Accidents in the kitchen and workshop: a) Cuts, b) Burns, c) Fracture, d) Fainting, e) Electric shock, f) Gas poisoning, g) Scald.
	7	Prevention of kitchen accidnets; Cuts; 1. Sharp kitchen tools and knives are to be kept separately and out of reach of kitchen. 2. Use the correct knife for the appropriate job. 3. Used eazor blade should be wrapped and disposed off in the bin. Burns; 1. Use pot holders and oven gloves in handling hot pans and baking sheets. 2. Keep matched out of reach of children. Scalds: 1. Keep all hot liquids out of children's reach. 2. Lift lids of saucepans towards you so that the stam will not scald your hands and face. Fainting; 1. Work in a god ventilated kitchen. 2. Work under appropriate height. Electric shock; 1. Avoid touching electrical appliances with wet hands. 2. Repair damage cords immediately. 3. Sockets should be switched off when not in use. Gas poisoning; Repair licked cyclinders immediately. Turn off nobs of burners after cooking. Work in good ventilated kitchen.

	7	Ways of preventing kitchen and workshop accidents: * Use flat-bottomed and well balanced cooking utensils on stoves so that they will not tip over easily. * Turn handles of cooking utensils inward that is out of the way of workers so that yhey will not be knocked off the burner. Handles should also not extend over another burner or surface unit which is hot. Use thick, dry pot holders when handling hot utensils. Do not use a dish towel as its drooping ends may catch fire. *When lifting the cover from a pan, raise it from the back so that the steam rises away from you. * Dry food throughtly before putting it into hot fat. Water may cause hat to splutter. *Close match covers and boxes before striking a match. Strike the match away from the body to prevent burns. * Never torn on a burner when no utensils are on it. Turn off all burners after they have been used. *Avoid wearing long, full sleeves around a stove. They can catch a burner and catch fire. *Use utensils that are in good working condition. Blunt knives and loose handles are dangerous. When using a knife, cut away from the body use a chopping board when slicing and shopping to prevent cuts. *Wash using a knife, cut away from the body use a shopping board when slicing and chopping to prevent cuts. *Wash and dry knives and other sharp utensils separately. *Use a can opener tat leaves a smooth edge. Do not use a kinife to open can and jars. A knife can slip and result in serious cut. *Wipe up spill from floor areas immediately to prevent anyone from slipping and falling. *Do not put a hot dish in cold water or on a wet surface. Sudden change in temperature can cause glass to break and aluminium saucepan to buckle. *Keep work areas neat when preparing food. Cluttered work area can result in mistakes and accidnets. *Wear thimles when hand sewing. * Do not leave pins and needle about. * Wear oven gloves when baking.
Technological Education	7	Keep matches out of reach of children.
Technological Education	7	Fig. 1.3.5: Portrait
Technological Education	8	Each amino-acid has its own chemical name. There are twenty-two of them, ten of which are called essential amino-acids. The remaining twelve are not they can be produced by the body. Adults need eight of these but children and toddlers need all of them.
Technological Education	8	-Babies and children require a lot of protein as they grow rapidly. -Adolescents require protein t support their rapid growth. -Pregnancy woman require more than normal to cater for the growing baby. - Nursing mothers require more than normal for milk production during breast-feeding
Technological Education	8	DEFICIENCY If there is lack of quality protein in the diet of children, they will not grow properly and they may be affected by disease called Kwashiorkor.
Technological Education	8	How to treat KWASHIKOR -A child who has Kwashiorkor should be given a lot of protein foods eg. Meat, fish, milk, soybeans, groundnut and aqushi.
Technological Education	8	FUNCTIONS OF VITAMIN A They * promote growth in children * Promote good growth and health
Technological Education	8	Deficiency * Lack of vitamin A may cause poor vision (night blindness) * Poor growth in children.
Technological Education	8	Children are now being given vitamin "A' supplement to aid their growth, by public health nurses.
Technological Education	8	A disease known as rickets is caused, where bones are not well formed. The bones are either curved or bowed resulting in a disease known as rickets in children.
Technological Education	8	FUNCTION OF VITAMIN E It * helps to improve fertility in females
Technological Education	8	(vitamin E) DEFICIENCY * prematured babies and people who cannot absorb fat may show signs of an increased breakdown or red blood cells and muscle tissue damage.
Technological Education	8	(vitamin B) FUNCTION *It is necessary for normal growth in children
Technological Education	8	DEFICIENCY Lack of vitamin B * Retards growth in children
Technological Education	8	(vitamin B2) FUNCTIONS * It promotes growth in children. DEFICIENCY * Growth in children is impaired
Technological Education	8	(calcium) DEFICIENCY * In children , bones and teeth are not formed properly.
Technological Education	8	REASONS FOR COOKING FOOD 1. To kill micro-organisms present in the food. 2. To preserve the food from natural decay 3. To destroy natural poisons (toxic) in foods
Technological Education	9	Storage of milk 1. Refrigerate fresh milk in its original container 2. it should always be covered and left in standing water if there is no refrigerator. 3. Milk jugs should always be clean and old milk should not be mixed with the new ones. 4. Milk should never be left in the sun because it spoils quickly.
Technological Education	9	toddler cannot chew food like grown ups so when planning a menu for the family with toddlers. They should be considered. They cannot take a lot of fatty foods.
Technological Education	9	When a woman is pregnant, she should always eat a balance diet. This is because a healthy well-nourished mother is likely to have a healthy baby than a badly nourished one. A woman's nutritional needs increase during pregnancy since she is meet the growth and maintenance of the foetus and her body. The diet should have sufficient carbohydrate and protein.
Technological Education	9	Babies rely solely on milk, for all their nutritional needs. Breast milk is ideal for them because of the following reasons 1. It is less likely to be contaminated 2. It is readily available 3.It has the right temperature 4. All nutrients are present in the right proportion
Technological Education	9	Toddlers School children's energy needs are very high because they are active.