CENTRAL NERVOUS SYSTEM.
CROSSCURRICULAR CONTENT.

1. Definition of drugs.
2. Origin of drugs.
3. Recognise drugs in everyday life.
4. Medicines:
    4.1 Use/abuse.
    4.2 Painkillers.
    4.3 Sedatives.
5. Alcohol
    5.1 Study case
    5.2 Role play
6. Tobacco
    6.1 Effects of tobacco in the body
    6.2 Poster asking for smoke-free areas

In terms of **language** we are going to learn:

Tick the column of the aims you think you are going to achieve:

	AIMS	YES	WITH HELP	I DON'T KNOW
1	Write a complete definition of drug.			
2	Write conclusions after analysing some facts.			
3	Talk, with a frame, about the origins of drugs.			
4	Collect statistics about common drugs in everyday life.			
5	Summarise information about medicines.			
6	Explain orally, with a model, effects of medicines.			
7	Perform a role-play about the consequences of the abuse of alcohol.			
8	Match the effects of tobacco.			
9	Make a poster asking for smoke-free areas.			

1. Read the definitions of drugs. Underline the most important information.

DRUGS.

A SUBSTANCE THAT AFFECTS THE BODY. IT CHANGES THE WAY YOUR BODY OR YOUR MIND WORKS.

A SUBSTANCE USED IN THE DIAGNOSIS, TREATMENT, OR PREVENTION OF A DISEASE. IT CAN ALSO BE USED AS A COMPONENT OF A MEDICATION.

A CHEMICAL OR NATURAL SUBSTANCE THAT AFFECTS THE CENTRAL NERVOUS SYSTEM. THIS CAUSES CHANGES IN BEHAVIOUR AND OFTEN ADDICTION. EXAMPLES OF THESE ARE: NARCOTICS OR HALLUCINOGEN

A MEDICINE OR ANOTHER SUBSTANCE, WHICH HAS AN EFFECT WHEN TAKEN INTO THE BODY.

A SUBSTANCE WITH NARCOTIC OR STIMULANT EFFECTS.

Define a drug, how it affects our body and possible dangers.

VOCABULARY SUPPORT.

Diagnosis: identification of an illness by the symptoms.
a) The doctor 's diagnosis of my coughing was bronchitis.

b)

Treatment: medical action to cure an illness.
a) The treatment for my bronchitis was a medicine called Flumil.

b)

Disease: disorder in body.
a) The doctors are looking for a solution for his stomach disease.

b)

Behaviour: the way somebody acts.
a) After drinking a beer the young boy started to do silly things.

b)

Addiction: became physically dependent on a substance
a) Granny has an addiction to sleeping pills.

b)

Narcotic: a drug that induces stupor or insensibility and relieves pain.
a) After the operation the doctor prescribed him a narcotic to relieve pain.
b)

Then match the words with their definition**.**

Diagnosis	**when our body is not working normally.**
Treatment	**how someone acts.**
Disease	**identifying an illness.**
Behaviour	**action to make things better**

2. ORIGIN.

Look at this chart. Find out about where some common drugs come from and if they are processed or not.

A

Where drugs come from.

NAME	WHERE DOES IT COME FROM?	NATURAL	PROCESSED
Aspirin (medicine)	Bark of the willow…..		
Caffeine Teine	Coffee **beans**. Tea **leaves.**	X	
Cannabis	*Cannabis sativa* .		
Digitalis (medicine)	Foxgloves (**plant**).		X
Taxol (medicine)	Yew.		
Tobacco	*Nicotiana tabacum* **plants**.	X	
Barbiturates			

Here you have a model of the sentences you can use.

Aspirin comes from …
and it is……

…… are artificially made.

……..comes from …
and it is not ……

To conclude we can say that:

"Some drugs come from animals, others ……then some are processed in laboratories but others are completely ……"

2. ORIGIN.

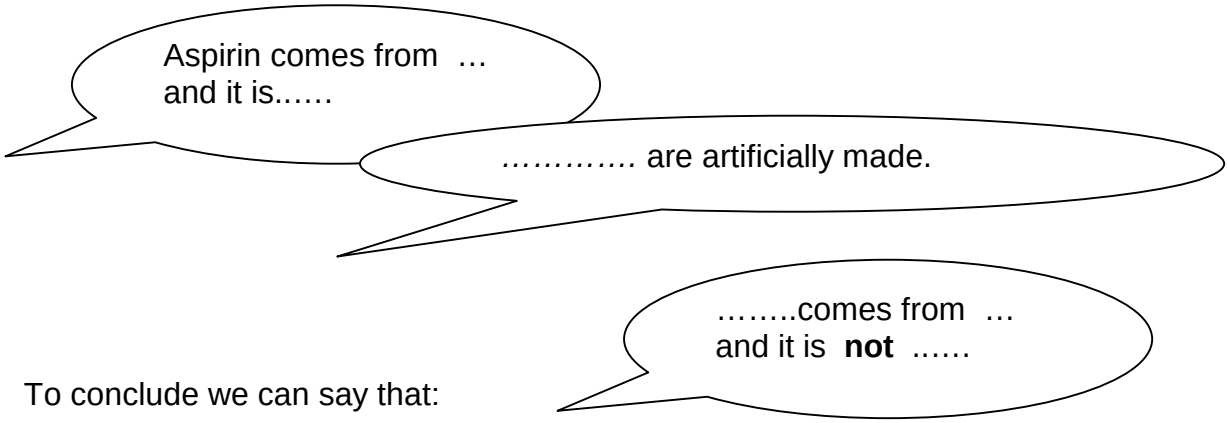
Look at this chart. Find out about where some common drugs come from and if they are processed or not.

B

Where drugs come from.

NAME	WHERE DOES IT COME FROM?	NATURAL	PROCESSED
Aspirin (medicine)	Bark of the willow **tree**.		X
Caffeine Teine	Coffee**…….** Tea **…….**		
Cannabis	*Cannabis sativa* **plant**.	X	
Digitalis(medicine)	Foxgloves ……		
Taxol (medicine)	Yew **tree**.		X
Tobacco	*Nicotiana tabacum* **.....**		
Barbiturates	**Artificially made**.		**X**

Here you have a model of the sentences you can use.



To conclude we can say that:

"Some drugs come from animals others ……Then some are processed in laboratories but others are completely ……"

3. We take drugs.

There are many kinds of drug. Most people take drugs.
Maybe you **see** them in your everyday life.
Give numbers from 0 to 10, 0 = never / 4= once a year / 6= once a month / 8= once a week / 10 = everyday

	 coke	 aspirin	 sleeping pills	 tobacco	 beer	 solvents	 ecstasy
Me							
My friend							

Now colour the bar chart according to the results in your group.

GROUP …….

10							
9							
8							
7							
6							
5							
4							
3							
2							
1							
	Aspirin	Beer	Coke	Ecstasy	Sleeping pills	Solvents	Tobacco

The survey shows the most common product containing a drug is ……..

Can you think of other common products? List them

According to our survey the most common medicine is …….

Can you list any common medicines you have used?

4. MEDICINES.

New drugs are discovered every day. Medicines are often made up from chemicals in a laboratory, but many are extracted from plants. One reason people are so concerned about destruction of the Amazon rainforest is because so many of our drugs have come from plants discovered there.

Medicines save thousands of lives every year. We are lucky to be living at a time when we have chemicals to help cure and control diseases that have been a danger for persons for thousands of years. But all drugs, even medicines, have to be sensibly used because the abuse of certain medicines can cause addiction and other problems.

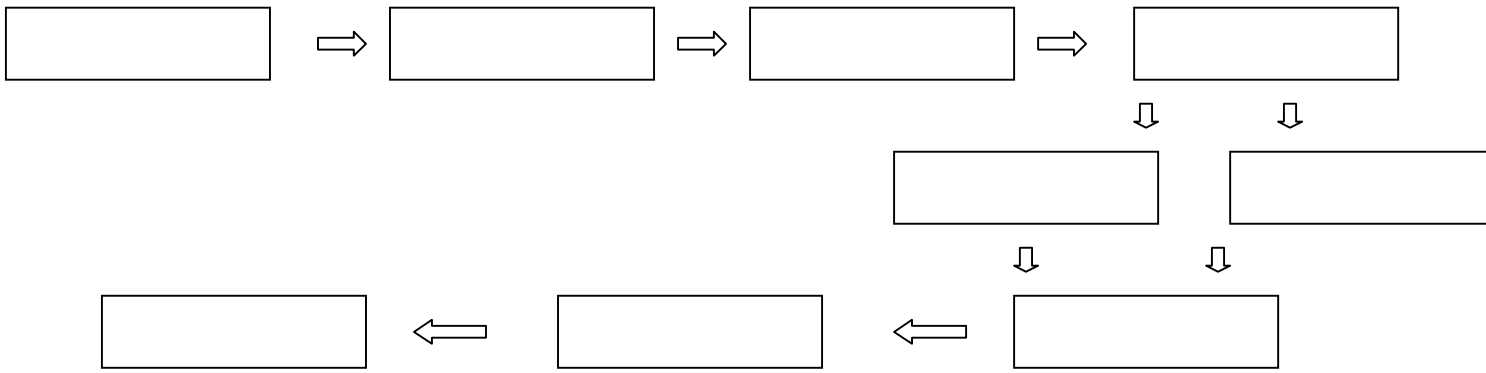
A) Choose a title for the text.

Medicines are life-saving drugs.
Medicines come from plant.
The abuse of medicine can cause problems.
Medicines come from the Amazon rainforest.

B) Discuss with your team.
Complete the flow chart with this essential information.
Talk in English, use the language charts.

Addiction/ Control diseases/ Laboratory/ abuse/ People take medicines to/

Plants/ Cure diseases/ Mental and physical problems/ Medicines/



C) Complete the text.

Use some of the words below.

plants	take	control	disease	laboratory	aspirin	abuse
mental problems		narcotic		sleeping pills		
medicines		cure	physical problems		addiction	Amazon

…….. are collected and taken to the …….. . There they turn into …….. People …….. …….. to …….. and …….. diseases. The …….. of medicines causes …….. that provokes …….. and …….. …….. .

Then explain it orally.

5. Long term effects of drugs.

Taking lots of medicines or using them for long periods of time can cause problems in your body.
Read carefully the information in the chart, then write the name according to the definition.

Painkiller: medicine for controlling pain. Sedative: medicine that promotes calm or induces sleep

----

Examples	Sleeping pills; tranquillisers; barbiturates
Work on:	Central Nervous System; muscles
Short term effects:	Slowed nervous activity Calming effect on mood Slowness, lethargy and sleepiness
Long term effects:	Addiction and can have depressant effects.

Examples	Aspirin; paracetemol; codeine; morphine
Work on:	Central Nervous System
Short term effects:	Suppress pain receptors in the CNS and reduce the activity of the brain parts that work as pain receptors.
Long term effects:	Aspirin, paracetemol and codeine can affect your digestive and circulatory system. The abuse of morphine can be very dangerous because user of the drugs can become dependent , for this reason doctors only prescribe them in very specific and controlled situations.

Match the medicine with its effects.

Medicine	Long term effects
Aspirin Sleeping pills Paracetamol Codeine Tranquillisers Morphine	can cause dependence. can affect your digestive system. can have depressant effects. can affect your circulatory system.

6. Tell your partner about different medicines. S/he has to fill a chart with the information you mention.

Use sentences as:

Aspirin is a painkiller.
It works on the Central Nervous System and in the pain receptors of the brain.
Immediate effects reduce the feeling of pain.
Taking them for a long time can affect the digestive and circulatory system.

Painkillers.

Examples	Aspirin; paracetemol; codeine; morphine
Work on:	Central Nervous System
Short term effects:	Suppress pain receptors in the CNS and reduce the activity of the brain parts that work as pain receptors.
Long term effects:	Aspirin, paracetemol and codeine can affect your digestive and circulatory system. The abuse of morphine can be very dangerous because user of the drugs can become dependent, for this reason doctors only prescribe them in very specific and controlled situations.

Complete the chart about **sedatives.**

Name	Works on	Short term effects	Long term effects
		Slowness, lethargy and sleepiness.	
Tranquillisers.			
	Central Nervous System		

6. Tell your partner about different medicines. S/he has to fill a chart with the information you mention.

Use sentences as:

Sleeping pills is a sedative.
It works on the Central Nervous System and in the muscles.
Immediate effects produce slowness, lethargy and sleepiness
It can cause addiction and depressant effects.

Sedatives.

Examples	Sleeping pills; tranquillisers; barbiturates
Work on:	Central Nervous System; muscles
Short term effects:	Slowed nervous activity Calming effect on mood Slowness, lethargy and sleepiness
Long term effects:	Addiction and can have depressant effects.

Complete the chart about **painkillers**.

Name	Works on	Short term effects	Long term effects
Aspirin			
Paracetemol			**Can affect your digestive and circulatory system.**
Codeine			
			The user can become dependent.

7. ALCOHOL.

CASE STUDY.

Read the information from the two cases.

1.

Granny usually drinks a glass of red wine at lunchtime. She very seldom drinks more than one glass. She says it is good for her circulatory system.

We are children and we drink grape juice without alcohol, it is sweet and tasty, and it has vitamins.

2.

Last Friday evening I met my neighbour helping his friend Peter. Peter was so drunk that he could not stand up.

It is a pity because Peter is a nice person, but when he drinks everything goes wrong. His friends are a bit fed up with the situation and they are going to tell him to stop drinking.

Here you have a list of adjectives.
Write numbers **1** or **2** according to the situation they describe.

Healthy		
Crazy		
Traditional		
Problem		
Sensible		
Unhealthy		

8. TOBACCO.

Cigarettes are made of tobacco that comes from a plant, and around other 4000 chemicals as nicotine and tar that are very dangerous for health.
The nicotine goes to the brain and stimulates the Central Nervous System in different ways.
You have heard about other effects of tobacco. Around 114,000 people die every year as a result of smoking-related illnesses.

Look carefully at the list and decide to what part of the body the tobacco affects.

Respiratory system.	
Digestive system.	
Circulatory system.	
Others	

You as children can be passive smokers and this increases your risk of:

Respiratory infection
Asthma symptoms
Wheezing
Chronic coughs

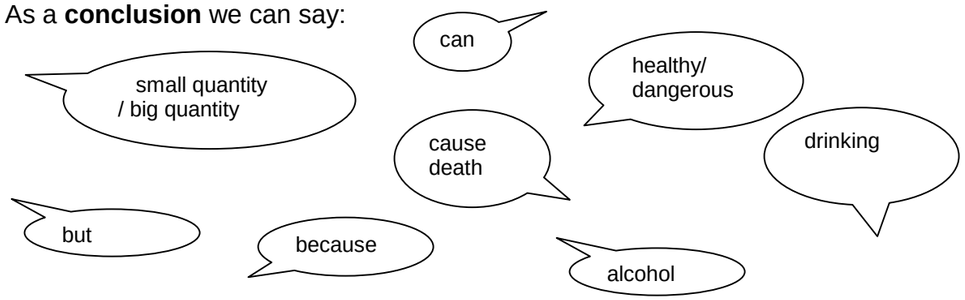
In a group of five make a poster to ask for smoke free places in all the areas you live.
As success criteria the text needs to be written in positive language, nice images must go with it.

7. ALCOHOL.

Perform a role-play related to the use of alcohol,
Write the letter you see in the blackboard in the correct place from this chart.

BLOOD ALCOHOL (mg/100ml)	EFFECT ON A MODERATE DRINKER.	SITUATION
20	Usually feel relaxed and able to 'let go' slightly.	
60	Unable to make sensible decisions.	
100	Tend to be clumsy and unable to walk straight.	
180	Very drunk and unmanageable; may later not be able to remember what has happened.	A
300	Often spontaneously incontinent. Possibly in coma.	
500	Likely to die without medical help.	

As a **conclusion** we can say:



ROLE-PLAYS.

20 mg/100ml Usually feel relaxed and able to 'let go' slightly.

You are adults. You are talking to a friend. Pretend you are drinking your second beer.
Your girl/boyfriend calls you, you are less shy.

60 mg/100ml Unable to make sensible decisions.

You are adults. You are talking to a friend. Pretend one of you is drinking his/her fourth beer.
When you are going to pay you give to the waiter your driving licence.
Fortunately your friend helps you.

100 mg/100ml Tend to be clumsy and unable to walk straight.

You are adults. You are walking along the street with a friend. You are stumbling with people all the way long.
You ask for pardon all the time. Your friend tells you not to drink anymore.

180 mg/100ml Very drunk and unmanageable; may later not to be able to remember what has happened.

You are adults. You are very drunk, it's too late and your friend tries to get you to go home. You don't want. Next morning you don't remember anything.

300 mg/100ml. Often spontaneously incontinent. Possibly in coma.

You are adults. You are in a bar. Suddenly you fall on the floor. Somebody calls for an ambulance.

500 mg/100ml Likely to die without medical help.
You are an adult. You are in the street unconscious. Two people see you and call for an ambulance; they talk about your problem.