

# CIE Biology GCSE

## 15 - Drugs

### Flashcards



# What is a drug?



# What is a drug?

A substance that alters the metabolism of the body (the chemical reactions that occur in the body)



What type of drugs are given for bacterial infections?



What type of drugs are given for bacterial infections?

Antibiotics



Why are some antibiotics less effective  
or no longer effective?



Why are some antibiotics less effective or no longer effective?

Bacteria can develop resistance to certain antibiotics



# What is antibiotic resistance?





# What is antibiotic resistance?

When bacteria are no longer affected by a certain type of antibiotic



# What is a 'superbug'?

## (Higher/Supplement)



What is a 'superbug'? (Higher/Supplement)

Bacteria which have become resistant to the majority of the different antibiotics available today



Give one example of a superbug  
(Higher/Supplement)



Give one example of a superbug  
(Higher/Supplement)

Methicillin-resistant *Staphylococcus aureus* (**MRSA**)



Give two ways that the development of antibiotic resistant bacteria be limited?  
(Higher/Supplement)



Give two ways that the development of antibiotic resistant bacteria be limited? (Higher/Supplement)

- Limiting the use of antibiotics for minor ailments like sore throats
- Ensuring that patients complete the full course of antibiotics



# Why are antibiotics ineffective against viral diseases like HIV?





Why are antibiotics ineffective against viral diseases like HIV?

Antibiotics kill bacteria not viruses



# Why do antibiotics not work on viruses? (Higher/Supplement)



# Why do antibiotics not work on viruses? (Higher/Supplement)

Antibiotics target mechanisms and features that are specific to bacteria (e.g. the formation of a cell wall) which do not exist in viruses



# How does heroin affect the nervous system? (Higher/Supplement)



How does heroin affect the nervous system?  
(Higher/Supplement)

Heroin activates the opioid receptors which then release dopamine into the brain which causes feelings of pleasure



# How does alcohol affect the nervous system?

## (Higher/Supplement)



How does alcohol affect the nervous system?  
(Higher/Supplement)

Alcohol slows down the nervous system



State the effects of heroin





## State the effects of heroin

- Feelings of euphoria and pleasure
- Sleepiness
- Addiction
- Potential spread of HIV from dirty needles
- Overdose can lead to death
- Withdrawal symptoms include insomnia, diarrhea and vomiting



# State 3 effects of alcohol



## State 3 effects of alcohol

- Slower reaction times
- Potential addiction problems
- Liver disease



State 3 medical conditions that smoking  
can cause



State 3 medical conditions that smoking can cause

- Chronic obstructive pulmonary disease (COPD)
- Lung cancer
- Coronary heart disease



What chemicals in cigarette smoke  
cause cancer?  
(Higher/Supplement)



What chemicals in cigarette smoke cause cancer?  
(Higher/Supplement)

Carcinogens like those found in tar



Describe the effect of tar on the lungs





## Describe the effect of tar on the lungs

- Tar contains chemicals that can cause cancer
- Tar can also degrade epithelial cells in the lungs which can lead to bronchitis



Describe the effect of carbon monoxide  
on the body



## Describe the effect of carbon monoxide on the body

Carbon monoxide binds permanently to haemoglobin which renders the haemoglobin useless and it cannot carry oxygen. This can lead to death as oxygen cannot reach the tissues



Name 2 drugs used to increase sporting  
performance  
(Higher/Supplement)



Name 2 drugs used to increase sporting performance (Higher/Supplement)

Testosterone

Anabolic steroids



# What do anabolic steroids do to the body? (Higher/Supplement)



What do anabolic steroids do to the body?  
(Higher/Supplement)

They increase muscle mass in the body



Where in the body are toxins and alcohol broken down?





Where in the body are toxins and alcohol broken down?

The liver

