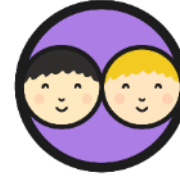


Remember It



Last lesson, we discussed diet and exercise. We learnt that different people have different calorie requirements. This depends on a number of factors.



Why would the 12-year-old girl and the 70-year-old man have different calorie requirements?

What Are Drugs?



What are drugs?

Can you give any examples?

Are all drugs bad?

A drug is any substance that has an effect on your body when it enters your system. Drugs contain chemicals which can either be human-made or from natural sources.



What Are Drugs?



Do you know any drugs that would be considered legal?

A **side effect** is any effect that is not the main intended effect of the drug. This can be either positive or negative.

Legal drugs include medicines like cough syrup and substances like caffeine, which is found in tea, coffee and even chocolate!

If used properly, these substances are not considered harmful and don't have serious negative **side effects**. However, even drugs you can buy in shops can be dangerous if you take too much.

Legal Drugs



What Are Drugs?

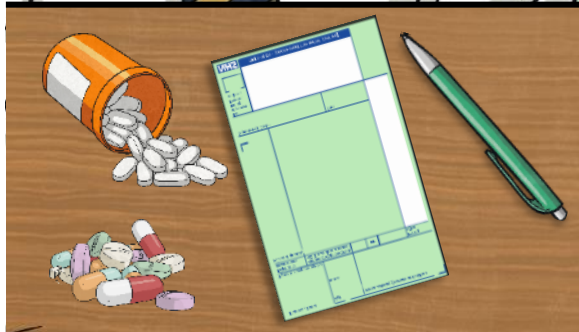
Prescription Drugs



What kind of drugs might you get on prescription?

This is due to several factors:

- Some medicines, for example sleeping tablets, can have serious side effects.
- Prescription drugs may not be suitable for some people, such as children or pregnant women.
- Certain drugs should not be taken at the same time as they could have serious side effects so a doctor needs to check a patient's records. This is why you should never take medication that has been prescribed for anyone else.



What Are Drugs?

Illegal Drugs



Illegal drugs are against the law to make, sell, have in your possession or use.

Can you name any illegal drugs?

Illegal drugs include cannabis, heroin, stimulants such as cocaine and ecstasy, psychedelic drugs such as LSD and magic mushrooms and psychoactive drugs such as nitrous oxide and 'legal highs' (which are not legal). It is also illegal to sell volatile substances such as glues, gases, solvents or aerosols to someone who is likely to use them as a drug.

What Are Drugs?

Illegal Drugs



Some of the main reasons why these drugs are illegal:

- They are linked to many serious physical and mental health problems, including cancer, heart attacks, strokes, long-term anxiety, paranoia and making risky choices that can also lead to physical harm.
- They can be highly addictive and people become dependent on them.
- There are no controls on how they are made so they may contain substances that are even more harmful.

What Are Drugs?

Alcohol



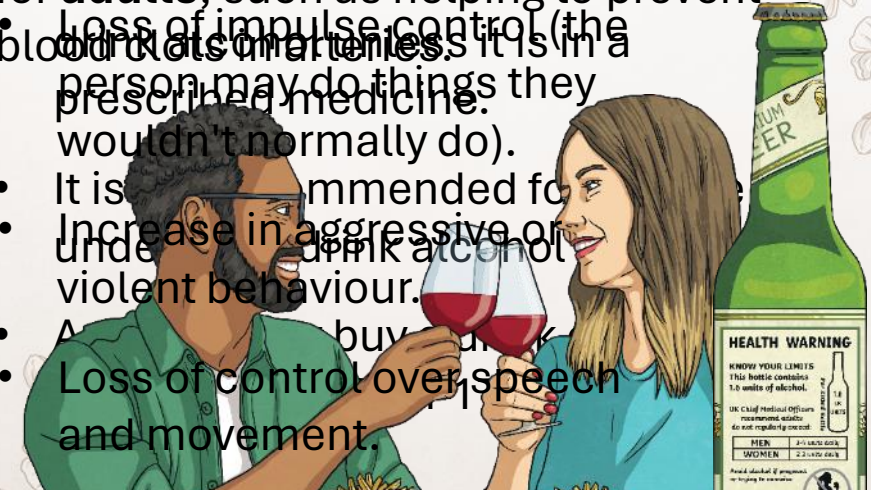


Alcohol is a drug made from the sugars in fruits and vegetables through a process called fermentation.

Alcohol is the only drug that is legal, but there are restrictions and recommended limits on its use. Drinking small amounts of some types of alcohol may have some health benefits for adults, such as helping to prevent blood clots and heart disease. It is in a prescribed medicine.

What are some possible negative effects of drinking too much?

- It is not recommended for children, under-18s or pregnant women.
- Increase in aggressive or violent behaviour.
- A person may buy or drink alcohol without a licence.
- Loss of control over speech and movement.



HEALTH WARNING
KNOW YOUR LIMITS
This bottle contains 1.5 units of alcohol.
UK Chief Medical Officers' recommendations do not regularly exceed:
MEN 3-4 units daily
WOMEN 2-3 units daily
Pregnant women should avoid alcohol.
Do not drink and drive.

X

Can you explain how drugs and alcohol affect us?

?

The Circulatory System



What is the circulatory system? Use your **Knowledge Organiser** to remind yourself what the circulatory system is.

Animals Including Humans
Animals Including Humans
Year 6

Key Vocabulary	
drug	A substance containing natural or man-made chemicals that has an effect on your body when it enters your system.
alcohol	A drug produced from grains, fruits or vegetables when they are put through a process called fermentation.
nutrients	Substances that animals need to stay alive and healthy.

Plasma is liquid. The other parts of your blood are solid.

Platelets help you stop bleeding when you get hurt.

Red blood cells carry oxygen through your body.

White blood cells fight infection when you're sick.

Drugs, alcohol and smoking have negative effects on the body.

A healthy diet involves eating the right types of nutrients in the right amounts.

Key Vocabulary	
circulatory system	A system which includes the heart, veins, arteries and blood transporting substances around the body.
heart	An organ which constantly pumps blood around the circulatory system .
blood vessels	The tube-like structures that carry blood through the tissues and organs. Veins, arteries and capillaries are the three types of blood vessels.
oxygenated blood	Oxygenated blood has more oxygen. It is pumped from the heart to the rest of the body.
deoxygenated blood	Deoxygenated blood is blood where most of the oxygen has already been transferred to the rest of the body.

The **heart** pumps blood to the lungs to get oxygen. It then pumps this **oxygenated blood** around the body.

Mammals have **hearts** with four chambers. Notice how the blood that has come from the body is **deoxygenated**, and the blood that has come from the lungs is **oxygenated** again. The blood isn't actually red and blue: we just show it like that on a diagram.

← **deoxygenated blood** **oxygenated blood** →

Capillaries are the smallest **blood vessels** in the body and it is here that the exchange of water, nutrients, oxygen and carbon dioxide takes place.

Arteries carry **oxygenated blood** away from the **heart**.

capillaries

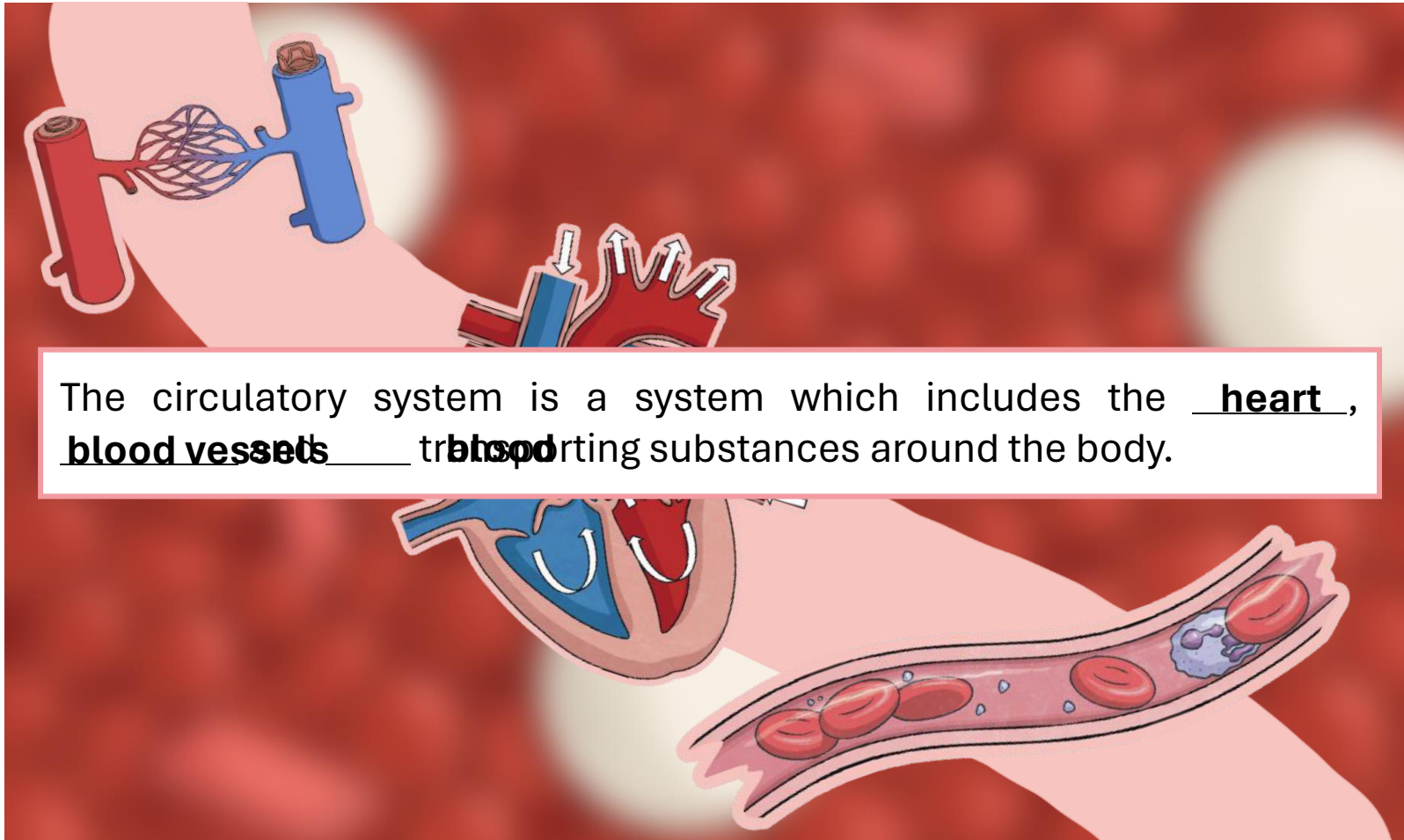
Veins carry **deoxygenated blood** toward the **heart**.

If you linked up all of the body's blood vessels, including arteries, capillaries, and veins, they would measure over 60,000 miles.

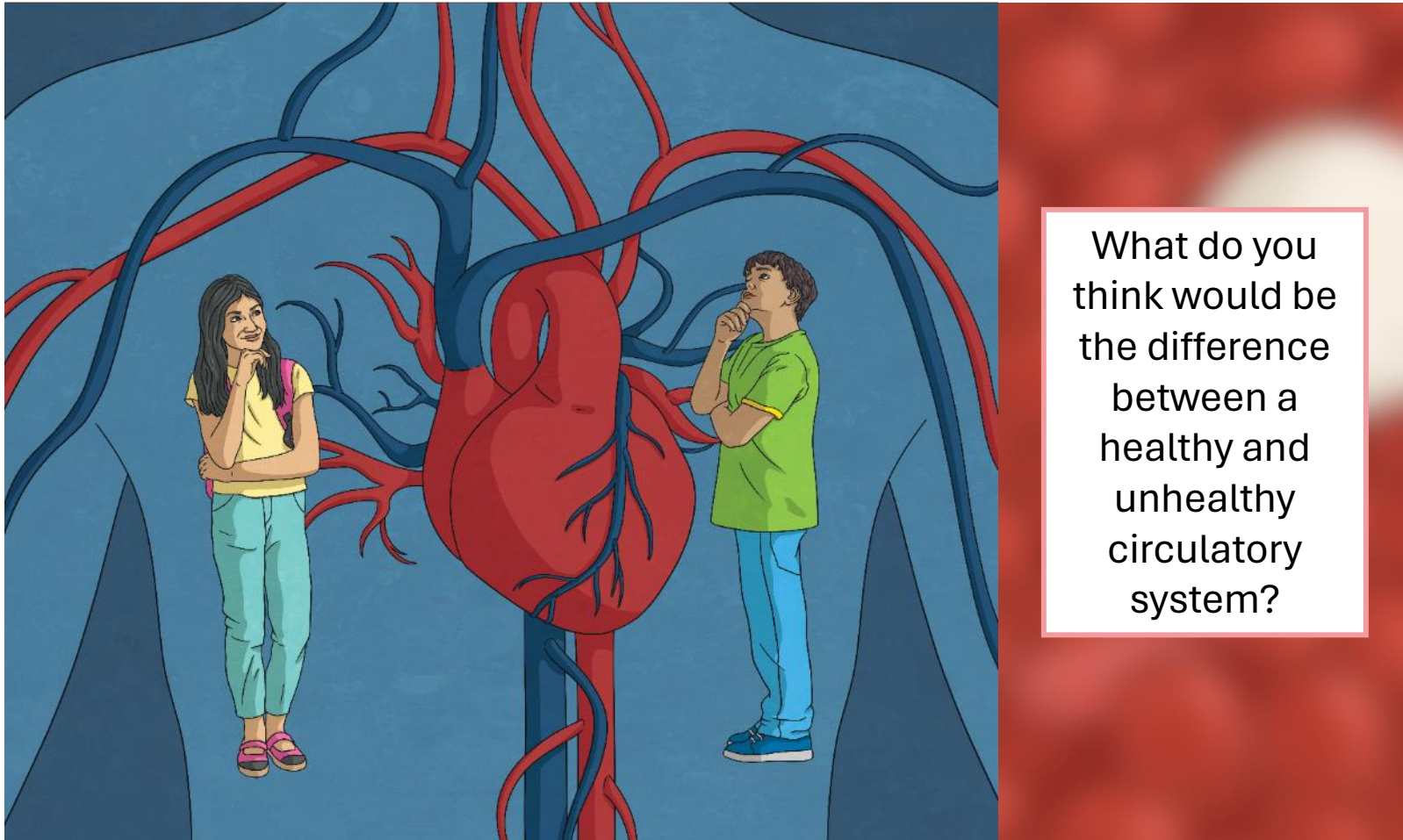
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The Circulatory System



The Circulatory System



What do you think would be the difference between a healthy and unhealthy circulatory system?

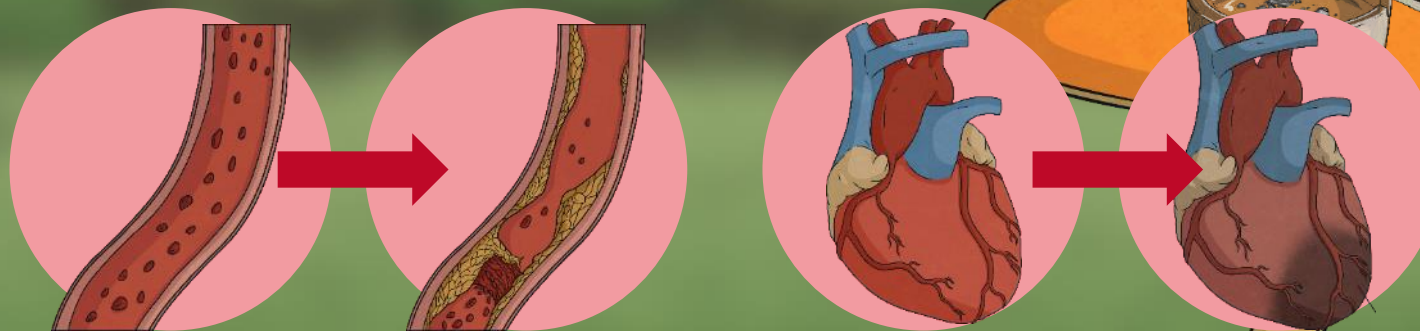
Drugs and The Circulatory System

Smoking Cigarettes

Cigarettes contain a drug called nicotine which is very addictive. There are lots of harmful chemicals in a cigarette.

These chemicals make our body form something called plaque inside our blood vessels.

Coronary heart disease can occur when blood vessels that carry blood to the heart muscle are narrowed by plaque or blocked by clots. Chemicals in cigarettes can actually cause the blood to thicken. This thickened blood and narrowing of vessels can form clots inside veins and arteries and an increase in blood pressure. Smokers are also at risk from an increased heart rate and possible irregular heartbeat.

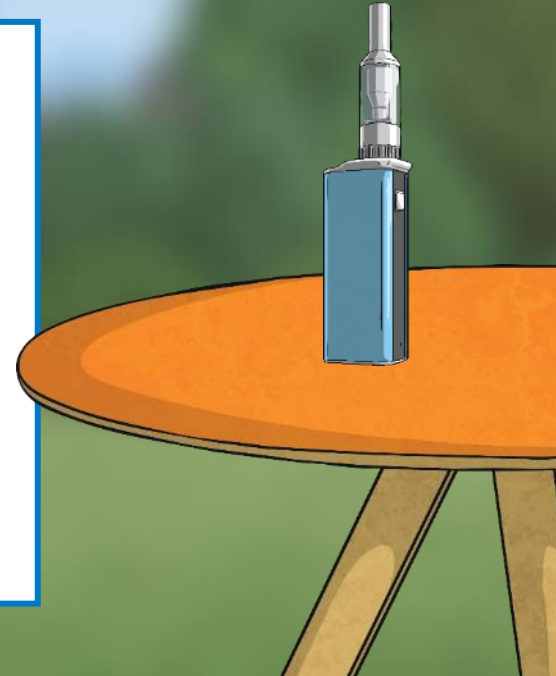


Drugs and The Circulatory System

Smoking E-cigarettes

We know what drugs are, but how can they affect our health?

In theory, e-cigarettes are less harmful than normal cigarettes as they don't contain the same harmful chemicals. However, people who smoke e-cigarettes (or 'vape') are still inhaling nicotine so they would still suffer the health problems associated with this. Also the effects of smoking nicotine in this way are not yet known, so it may not be less damaging to the body after all.



Drugs and The Circulatory System

Alcohol



We know what drugs are, but how can they affect our health?

Alcohol can certainly affect our body. You might know it can harm the liver, but did you know it can even harm the heart? At the time of drinking, alcohol causes a temporary increase in heart rate and blood pressure. Over time, drinking heavily can lead to a long-term increased heart rate, higher blood pressure, weakened heart muscle and irregular heartbeat.



X

Can you describe the impact of drugs and alcohol on the circulatory system?



Task:

Over a 2 page spread, divide your space into 4 sections.

Impact of smoking on the body

Impact of e-cigarettes on the body

Impact of alcohol on the body

Drug and alcohol laws

Write about each using our learning from today's lesson including images and additional facts. It is up to you how you present your information but it is important that it is bright and attractive.