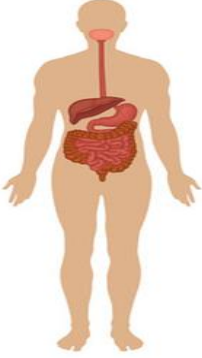




1. Organ Systems

There are 11 different body systems. These all have specific functions in the body to ensure that the body can keep a person alive

		
Digestive system	Skeletal system	Breathing system
Breaks down large food molecules into smaller soluble molecules so they can be absorbed into the blood.	To protect, support and cause movement.	To exchange gases in the lungs
Stomach, small intestines, large intestines, liver, pancreas	All the bones in the body, e.g skull, femur, humerus, etc.	Lungs, diaphragm, trachea, bronchioles.

2. Key Words



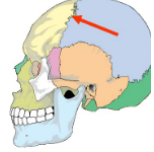
Key Word	Definition
Cell	Smallest unit in a living organism
Tissue	Group of similar cells working together
Organ	Group of tissues working together
Organ System	Several organs and tissues working together

3. Skeleton and muscles

The skeleton has 4 essential functions

Protection	Support	Movement	Making blood cells
Bones protect our vital organs e.g. skull protects the brain	Without our bones, our body would not be able to support itself	It works with our muscles to move our body	Bone marrow in the middle of bones produces red and white blood cells

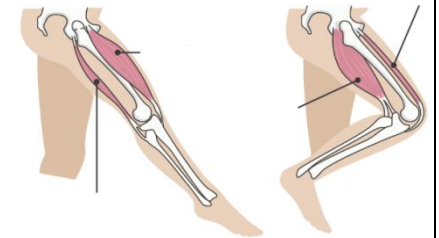
Movement In order to move, our skeleton has joints

Hinge joint		Ball and socket joint		Fixed joint	
	Examples: Elbow, knee,		Examples: Hips, shoulder		Examples: skull, pelvis

There are many tissues that work together to support movement

Muscles	Tendons	Ligaments	Cartilage
Attach to bones. Work in pairs to make the bone move.	Tissue that connects the muscle to the bone.	Tissue that connects the bones together.	Smooth, hard coating on joint bones to make movement easy

Muscles work in antagonist pairs: This means that one needs to contract and the other needs to relax to move bones at a joint



4. Smoking

Cigarettes contain over 2000 chemicals, around 60 of which are carcinogens (they cause cancer).

There are 3 main harmful chemicals in cigarette smoke:

Chemical	Effect on the body
Nicotine	Addictive substance that causes cravings. Causes fat deposits to build up in the arteries.
Tar	Carcinogen that causes cancer in the mouth, throat and lungs. Paralyses the cilia cells, leading to an increase in chest infections.
Carbon monoxide	Binds irreversibly to red blood cells to reduce the levels of oxygen in the blood.

5. Vaping and E-Cigarettes

Vaping has become increasingly popular with 16 – 24 year olds over the last 15 years.

E-cigs were first introduced in 2005 as an alternative to tobacco and marketed as supporting people to quit smoking.

The introduction of sweet like flavours appealed to teenagers and young adults and in 2009 laws were put in place to make it illegal to sell e-cigs and vapes to people under the age of 18.

New Evidence:

The collation of data from over 800 research studies in to the effects of vaping on the body found the following common long term effects of vaping:

- Increased risk of lung disease (COPD)
- Increase risk of heart disease
- Increased risk of hardening of the arteries
- Increased risk of developing asthma

6. Alcohol

Alcohol is a depressant that slows down the reactions in the body by reducing the ability of the nerve impulses to be transmitted.

Drinking excessive volumes of alcohol can cause permanent damage to the liver.

Short term effects	<ul style="list-style-type: none"> • Poor balance • Slow reactions • Dizziness • Slurred speech • Vomiting • Headaches • Blurred vision
Long term effects	<ul style="list-style-type: none"> • Jaundice • Increased risk of liver disease • Increased risk of liver failure • Increased risk of strokes • Increased blood pressure • Increased risk of developing a range of cancers