The Western Front knowledge organiser

Key dates	
1895	Wilhelm Rontgen discovered x-rays.
1901	Karl Landsteiner discovered the existence of three different blood groups A, B and O.
1914-18	World War One
October- November 1914	The First Battle of Ypres. This was an attack by the Germans to try and take control of the channel ports. It failed and the English maintained control. The British lost over 50,000 troops in this battle.
December 1914	5 mines were placed under the man made hill 60. The British had tunnelled under it to blow the top off. Britain were then able to take this strategically important position.
April-May 1915	The Second Battle of Ypres. This was the first time that the Germans used chlorine gas. British losses totalled 59,000 men and the Germans moved 2 miles closer to the town of Ypres.
July 1916	The Battle of the Somme. This was the bloodiest battle of the war, with 20,000 British men dying on the first day alone. This was the first time that tanks were used in warfare and creeping barrage failed as a strategy. British casualties totalled 400,000.
April 1917	The Battle of Arras where 24,000 soldiers who had been hiding in tunnels dug near the German trenches attacked. The offensive was successful and the British advanced 8 miles. However they were unable to advance any further and casualties totalled 160,000 British and Canadian.
July 1917	The Third Battle of Ypres, also known as Passchendaele. The British launched their attack and gained 2 miles, however the weather as poor and the ground became waterlogged. The campaign lasted until November and the British gained 7 miles in total, however there were 245,000 British casualties.
October 1917	The Battle of Cambrai was the first time there was a large scale use of tanks in a battle- nearly 500 were used.

Key terms	
The Western Front	The zone of fighting during the First World War
BEF	The British Expeditionary Force were the British Army. From 1915 inwards these men had been conscripted to the army and so had little training.
Trenches	These were dug to protect the armies from attack. They were around **2.5 metres deep and laid out in a zig zag pattern** to protect from blasts. The order of the trenches was; **frontline trench, support trench 80 m back, reserve trench 100 m back and communication trenches** running between them. The area between the trenches was known as no-man's land.
Aseptic surgery	This method of surgery was developed before WW1 and meant that no germs would enter the operating theatre as **all equipment was steam sterilised and doctors wore protective clothing.** It was developed by **Robert Koch**.
Horse drawn and motor ambulances	Horse drawn ambulance wagons found it difficult to cope with the number of casualties an often made injuries worse due to the movement in the wagon. Motor ambulances struggled with the terrain and were not able to reach injured soldiers. Horse drawn ambulance wagons were used for much of the war, with **6 horses rather than 2 pulling the wagon in difficult terrain**.

RAMC	The Royal Army Medical Corps was responsible for medical care in the army.
FANY	The First Aid Nursing Yeomanry. This was a women's voluntary organisation which provided frontline support for the medical services including driving ambulances and supplying emergency first aid.
Trench foot	This was painful swelling of the feet caused by standing in cold mud and water. Prevention was key including rubbing whale oil onto feet.
Trench fever	This involved flu-like symptoms with high temperature, headache and aching muscles. **It affected an estimated 500,000 men**. By 1918 the cause had been identified as lice and delousing stations were set up.
Shellshock	This is now known as post-traumatic stress disorder but it was not well understood at the time. Symptoms included tiredness, headaches, nightmares, loss of speech, uncontrollable shaking and mental breakdown. An **estimated 80,000 British troops experienced shellshock**.
War wounds	These included injuries from battles such as gunshot or shrapnel. **High explosive shells and shrapnel were responsible for 58% of wounds**.
Gas attacks	Gas was first used during the Second Battle of Ypres. It led to death by suffocation and caused internal and external blisters. **Chlorine, phosgene and mustard gas** were used in WW1. From **July 1915 all British soldiers were given gas masks. Approx. 6000 British soldiers died from gas attacks**.
The chain of evacuation	The main stages in the chain of evacuation were the **regimental aid posts, dressing stations, casualty clearing stations and base hospitals**. This system aimed to move injured soldiers away from the frontline and either treat them to allow them to return to the trenches or move them away from to a base hospital for further treatment.
The underground hospital at Arras	As part of the tunnels and caves around Arras there was a fully working hospital. There were rooms for the wounded, **700 spaces** where stretchers could be placed as beds, an operating theatre and a mortuary. The hospital was abandoned after the Battle of Arras in 1917.
Amputation	If antiseptics failed to stop infection then amputation of limbs was the only option. **By 1918, 240,000 men had lost limbs through amputation**.
The Carrel-Dakin method	This aimed to stop infection through using sterilised salt solution in the wound through a tube. This was effective however **it only lasted for 6 hours** and had to be made as needed, something that was not possible with the large numbers of wounded men.
The Thomas splint	This was a method of keeping a leg with a compound fracture still and straight so as to prevent further blood loss or infection. It was **introduced in December 1915 and the survival rate for men with a gunshot or shrapnel wound to the leg and compound fracture went from 20% to 82%.**
The Brodie helmet	A steel helmet with a strap that prevented it being blown off in an explosion. It **reduced fatal head wounds by 80% after 1915**.
Mobile x-rays	X-rays helped surgeons identify the location of shrapnel and bullets in the body. However they could not detect all objects, were fragile and slow. When the USA entered the war in 1917 they supplied improved technology to make x-rays more suitable to the conditions on the Western Front.
Blood transfusions	The use of blood transfusions from **1915 was proposed by Lawrence Bruce Robertson** once the problems of storage and clotting had been overcome through **adding sodium-citrate and citrate-glucose** to blood. This meant that **by 1917 Oswald Hope Robertson had stored blood at Cambrai in a blood bank and was able to use to treat 20 wounded men, 11 survived.**
New forms of surgery	Brain surgery and plastic surgery both developed during the war. Brain surgery was developed by **Harvey Cushing** who used a magnet to remove metal fragments from the brain. **Harold Gilles** worked with plastic surgery to reconstruct the faces of wounded soldiers.