

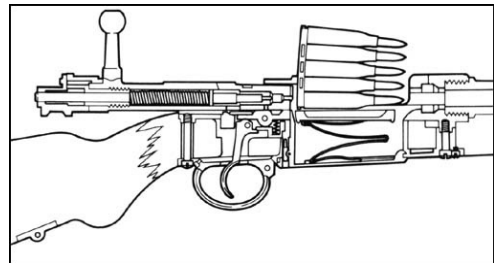
Weapons and New Technologies of World War I

During World War I, the soldiers in the trenches used a wide variety of weapons. These included:

- ◆ Rifles and pistols
- ◆ Machine Guns
- ◆ Artillery
- ◆ Bayonets
- ◆ Torpedoes
- ◆ Flame Throwers
- ◆ Mustard and Chlorine Gases
- ◆ Smokeless Gunpowder

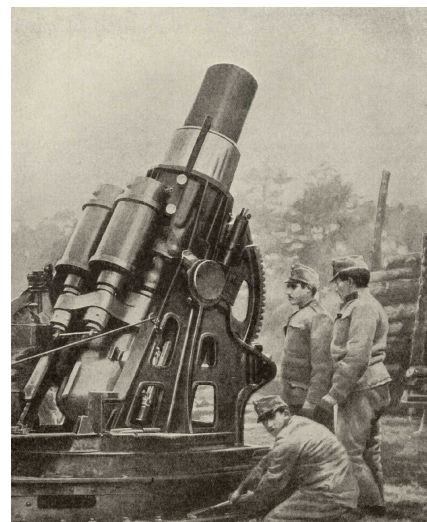
As well as using them in the trenches, some of these weapons were used by tanks, U-Boats, Zeppelins and planes.

In the trenches, the weapon carried by all British soldiers was the **bolt-action rifle**. It was possible for soldiers to fire 15 rounds per minute and, in some instances, kill someone up to 1,400 metres away. Many soldiers had a **bayonet**, or long blade, attached to the end of the rifle barrel for close combat.



Unlike today, **machine guns** were not the main weapon used by soldiers. They needed 4 - 6 men to operate them in 1914 and had to be positioned on a flat surface. They had to have a water tank attached in order to keep them cool. They could fire up to 400 rounds per minute and had the fire power of 100 rifles.

Artillery is a word used to describe large-calibre mounted field guns. The calibre is the diameter of the barrel. The picture to the right is an example of the heavy artillery that was used in the trenches. Sometimes they were referred to as seige guns because the stalemate of the trenches meant armies needed long-range weapons that could deliver devastating blows to the enemy. They needed crews of up to 12 men to work them; the shells weighed up to 900 pounds - very heavy.





This war was also the first to use **chlorine** and **mustard gas**. The German army was the first to use chlorine in 1915 at Ypres.

French soldiers had not come across this before and assumed it was a smoke screen. It has a distinctive smell – a mixture of pepper and pineapple – and they only realized they were being gassed when they started to have chest pains and a burning sensation in their throats. Death was painful – suffocation.



The problem with using chlorine was that weather conditions had to be right before it could be used. Can you think why?

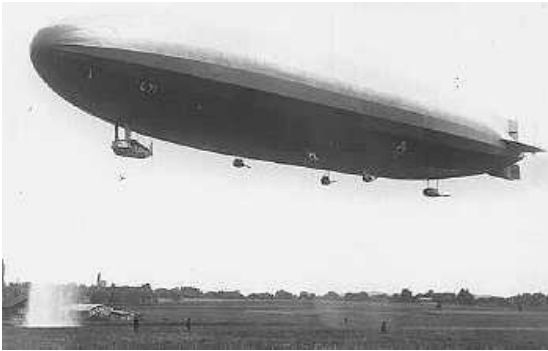
Afterwards, Allied forces discovered that urine-soaked rags neutralized the chlorine. However, fighting was very difficult if you had to hold a rag to your face all the time.

Mustard gas was the most deadly biological weapon used in the trenches. It was odorless and took 12 hours to take effect. It was also very powerful – only small amounts needed to be added to shells to be effective and it remained active for several weeks when it landed in the soil.

The nastiest thing about mustard gas was that it made the skin blister, the eyes sore and the victim would start to vomit. It would cause internal and external bleeding and would target the lungs. It could take a soldier up to 5 weeks to die, all the while suffering from the effects of the gas.



War Machines

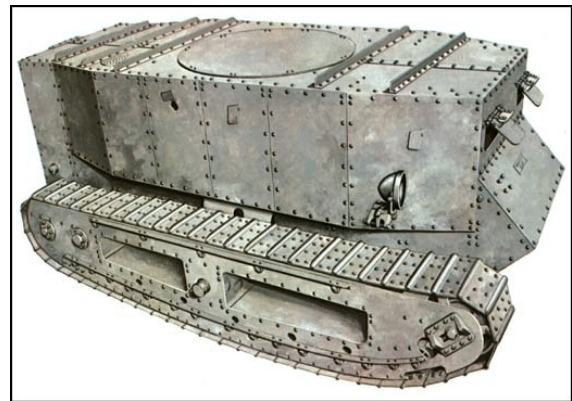


The **Zeppelin**, or blimp as it is also known, was an airship used in the early part of the war in bombing raids by the Germans. These airships weighed 12 tonnes and contained over 400,00 cubic feet of hydrogen. They were moved along by two engines which could propel the ship up to 136 miles per hour and get up to heights of 4250 metres. They usually carried machine guns and around 4,400 pounds of bombs.

They carried out many raids but were

eventually not used at all. Can you think of reasons why?

Tanks also started to be used for the first time in World War I. Since small armoured cars could not cope with the terrain of no man's land, Britain needed a machine which could act as an assault vehicle as well as protection for advancing troops. The first tank was called "Little Willie". It had a Daimler engine, a caterpillar track and needed a crew of 3. It's maximum speed was 3 miles per hour and it was unable to get across trenches. Not very effective.



The more modern tank was not completed until several weeks before the end of the war. It was called the Fiat Tipo. It could fit a maximum of 10 men, had the first revolving turret and could reach speeds of 4 miles per hour.

This war also had another first: planes started to be used to observe enemy troop movements. Then they dropped bombs on enemy positions. Planes became fighter aircraft armed with machine guns and enemy pilots fought each other in the air in "dogfights" to protect the men on the ground.



THINGS TO DO

1. Make notes about the main types of weapons used in World War I.
2. What is Artillery?
3. Why do you think the bayonet became an old-fashioned weapon during this war?
4. Why do you think that machine-gunner crews were more likely to be killed by the enemy than foot soldiers, if they were captured?
5. What are chlorine and mustard gases?
6. Why **would** chlorine need certain weather conditions?
7. Draw a table comparing chlorine and mustard gases to show:
 - a) the smell of the gas
 - b) the effects on the soldiers
 - c) how long it took to take effect
 - d) how long it took to die
 - e) when they were first used in battle
 - f) the problems with using it
8. What is a Zeppelin?
9. Why do you think they were easy targets?
10. Why were tanks unsuccessful war machines in WWI?
11. How **did this war** change the way men fought in battle?