# World War II Resource Pack





# Introduction.

Thank you for booking a visit to RAF Museum Cosford. This resource pack has been designed to complement your visit to the museum and has links to the national curriculum.

The information at the front of the pack covers topics relating to the war including

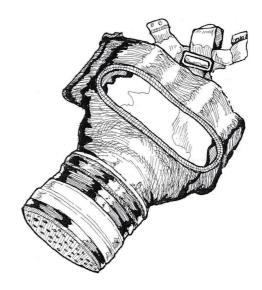
- Britain's preparations for war.
- The Outbreak of war.
- Battle of Britain.
- How we coped at home.
- The rest of the war.
- The cost of the war
- Since the war ended.

These pages are for reference purposes only and can not be reproduced.

The activity pages within this pack are designed to be photocopied for use with the children both prior to and after a visit.

We hope this pack is helpful to you and you enjoy your visit to the museum.

Access and Learning Team RAF Museum Cosford.



# Britain's preparations for War

The British Government had begun preparations for a possible war long before it came about. Anderson and Morrison shelters were issued in areas most at risk of being bombed. Anyone who failed to take advantage of them was fined.

Plans were made for the rationing of certain foods and other commodities. Prices were fixed for many items to try to stop profiteering but there was still a thriving black market throughout the rationing period.

Precautions against the use of poisonous gas were taken and gas masks were available for every adult, child and baby. These were issued right at the beginning of the war but were never actually needed. Some working horses were also issued with masks.

Evacuation procedures for children, pregnant women and blind people living in London and other cities were in place.

Why were people issued with gas masks?

Why were children evacuated?

VACUATION

WHY AND HO

Leaflets were produced to tell the civilian population what was being done for them and what they had to do in event of a war.

#### Public information Leaflets 1-4 July 1939

- 1. Some things you should know if war should come
- 2. Your gas mask and masking your windows
- 3. Evacuation. Why and how?

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they ought to do if they have no

those

4. Your food in Wartime.

Men who could not join the forces because they were too old or unfit were expected to help in the home guard or fill the jobs left vacant by fighters e.g. miners, factory workers, farm workers, firemen and many others. Many of these jobs were also filled by women.

# The Outbreak of War

On 3 September 1939 the British and French governments declared war on Germany, after the Germans had invaded Poland.

Germany had succeeded in over-running Poland in just over one month by the use of a new form of warfare, blitzkrieg or 'lightning war'. This called for the rapid destruction of Poland's air force by the Luftwaffe and the concentrated use of large numbers of tanks to destroy the Polish army.

In the West, Britain and France prepared for an assault that did not come for over six months. This period became known as the Phoney War in the American press. The only action between British and German forces was at sea where the British Navy had imposed a blockade and German submarines were sinking merchant shipping.

On May 10 1940, Germany invaded Holland, Belgium and France, using the same tactics as in Poland.

By the end of May, both the Dutch and the Belgians had surrendered and more than 500, 000 men of the French army and the British Expeditionary Force were forced back to the French coast. The Germans then came around the French defensive line at Maginot and attacked the French and British from behind. Between 26 May and the night of 3 / 4 June 340,000 troops, mostly British, were safely evacuated from Dunkirk using hundreds of boats of all sizes and descriptions. France asked for an armistice and from June 17 Northern France was under German occupation.

Hitler now ruled over most of Europe and only Britain was still actively fighting against him. The American people, though sympathetic, did not want to get involved in what they saw as another costly European problem and congress had passed a neutrality law, forbidding material assistance to all parties in foreign conflicts.

In order to win the war all Hitler had to do was defeat Britain.

Hitler was the leader of the German Government in 1938





In May 1940, Winston Churchill, newly elected British Prime Minister said'

I have nothing to offer, but blood, toil, tears and sweat. You ask 'What is our aim?' I can answer in one word : Victory'.

# **Battle of Britain**

On 18 June 1940, Winston Churchill speaking in the House of Commons said

'What General Weyland called the Battle of France is over. I expect the Battle of Britain is about to begin'

> In order to invade Britain, Hitler needed to bring his army across the English Channel. To carry the invasion force he assembled a fleet of nearly 170 large transport vessels, 1,500 barges and hundreds of tugs, trawlers, motor boats and fishing smacks. The British Navy was superior to Germany's and could have prevented the invasion so it had to be neutralized. The first step to commanding the sea was to defeat the British air force, the RAF and so dominate the sky.

#### Where was the Battle of Britain fought?

#### What is meant by "blitzkrieg"?

In August 1940 the Germans launched daylight raids against British ports and airfields and in September against inland cities to try to draw out the RAF planes and destroy them. The Germans had not realised how effective British Radar was. Stationed around the South and East of England the Radar gave warning of the German Luftwaffe attacks. The outnumbered RAF could then send planes to intercept the enemy and were so successful that on most raids the losses were higher for the Luftwaffe. Ground defences such as anti-aircraft guns and barrage balloons were placed around towns, cities, factories, military installations and airfields. These deterred more accurate low level bombing and restricted the German planes to predictable routes making interception by the RAF easier.

Not knowing that the bombing of the airfields had almost destroyed the RAF, London was bombed for the first time on the night of August 24 1940 prompting Britain to retaliate by bombing Berlin. The German people reacted so strongly to this that their military commanders were forced to switch the focus of their attacks from the British airfields to the cities. This reprieve allowed the hard pressed RAF to recoup their losses, both in machines and pilots. On 7 September 300 bombers ringed by fighters flew to London and destroyed a large part of the docklands east of Tower Bridge. On 15 September 200 bombers and 700 fighters were met on the way to and over London. After this raid had failed to break the British fighting spirit Hitler conceded that he could not defeat the RAF. On 17 September Hitler postponed any plans for the invasion of Britain. The Battle of Britain was over.

This did not mean that the Germans gave up bombing Britain but at the end of September, due to heavy losses, the Germans switched to night bombing. Over the next seven months they launched 71 major attacks on London and 56 on other cities. This was known as the Blitz.



# How we coped at home

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During the two world wars of the 20<sup>th</sup> century more civilians were affected than in previous conflicts. This was most noticeable in the Second World War. The area where fighting took place was not confined to battle fields. Bombs were dropped on homes, factories, schools, hospitals and churches. Armies fought back and forth over vast areas of Europe destroying everything as they passed. People suffered shortages in food, clothing and many imported and manufactured items.

Whilst so many of the men were away fighting the women had to take over jobs that men had traditionally done. These included working in factories, on the farms, driving and even flying. Many people had to leave their homes when they were damaged or destroyed by bombing. Others left because they were living in areas likely to be bombed.

At the beginning of the war in 1939 many people had memories of the gas attacks during the 1914-1918 war. People were afraid of being bombed by poisonous gas so the government gave out masks to wear. Everyone including children had to keep their gas masks with them all the time.

When the planes came from Germany to drop their bombs the sirens would sound the alert. Everyone would rush into their Morrison shelter, Anderson shelters or public shelter, such as the underground railway stations in London.

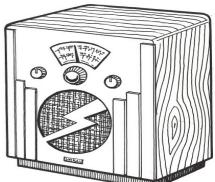
Night bombing raids over British cities resulted in blackout precautions. New laws required thick dark curtains over windows and special slotted shields on cars and bicycles to direct their lights downwards. Combined with the lack of street light this made roads very dangerous, doubling the number of accidents.

Large trees along the sides of roads had white circles painted around their trunks and lines were drawn on the edges of pavements to make them more visible at night.

The London Blitz lasted for 56 nights from September 7 until November 2 1940. Each morning people cleared the rubble from the streets and then went to work as usual.

At the end of 1940 the German Luftwaffe began bombing other cities like Coventry, Birmingham and Liverpool.

Pre 1940 we imported two thirds of our food but the need for ships to carry war supplies and the attacks on shipping on German U boats resulted in the introduction of rationing for some products. The system resulted in a personal allowance with limits in place. The need to produce more food in this country led to the government asking people to grow their own food wherever possible and for farmers to use all available land.

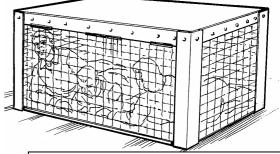


Before television arrived the wireless (radio) provided entertainment and news!

> What was the "blackout" and why was it needed?

In what ways did women help with the war effort?

Describe an Anderson shelter?



Some people did not have Anderson shelters so made Morrison shelters partly from their kitchen tables.

# The rest of the War

The war expanded quickly from a conflict between the allies – France, Britain and Germanyinto one involving the Balkans, Italy, North Africa, South-Eastern Europe and Russia. By the late summer of 1941 America was in a state of undeclared war with Germany. At this time Japan was expanding into China and Indochina. The allies decided that they must first deal with Hitler and then turn to Japan.

Germany invaded Russia on June 22 1941 and, until the onset of winter halted them, the German panzer groups were driving all before them. Russia survived more attacks through the summer of 1942, mainly due to a mistake by Hitler. Thinking victory was definite in Russia in 1941 he had stopped building tanks and ammunitions for the army and switched to aeroplanes and ships. It still required a tremendous effort to halt the Germans at Stalingrad. On November 19, the Soviets counter attacked and drove out the German army.



During the following year the Axis powers were put under more and more pressure by the allies with increasing number of American soldiers arriving all the time.

It was decided at the Tehran conference, between Churchill, Roosevelt and Stalin; that there would be a major new offensive from the west in May 1944. It was to be called operation Overlord. It actually began on 6 June 1944. The British and American armies landed and established beachheads on the Normandy coast in France. Overwhelming air superiority stopped the Germans countering the landings and moving troops into the area. Hitler, convinced that the landings in Normandy were a diversion and the invasion was to occur further north, hung onto his reserves.

By the end of June the Allies in Normandy numbered 850,000 troops and 150,000 vehicles. The Soviet army then defeated the last German army in Russia. On 20 July German officers tried but failed to assassinate Hitler with a bomb. Paris was liberated on 25 August and then Antwerp on 3 September.

During the rest of 1944 the fighting continued mainly from the air. American bombers, escorted by Mustang fighters, hit industrial targets during the day and then at night the British bombed German cities. Until October Hitler had French and Belgium sites from which he had first sent V1 and then V2 rockets to bombard England. The end of the bombing came as a great relief to those living in the south of England who had suffered most from the rocket attacks. Allied bombing reduced the German iron and steel production by half. However, by limiting their industries to the war effort their output of fighter planes and armoured vehicles reached a war time high in the second half of 1944. However, supplies of oil were severely reduced so that many of the new vehicles could not be used.

In February 1945 the Allies advanced into Germany. In April British, American, French and Russian troops arrived in Berlin. On 30 April Hitler committed suicide in his under-ground bunker. Doenitz, the new German leader, ordered an immediate, unconditional surrender. May 8 was declared VE (Victory in Europe) Day.

The war continued in the Far East against Japan. The majority of British service men had been involved in the European conflict and so demobilisation began when Germany surrendered.

# The Cost of the War

The War caused a long term drop in the population growth rate of the countries involved because many of those killed were the right age to have become fathers. In Eastern and Central Europe military deaths, civilian deaths due to bombing or food shortages, a drop in the birth rate, and the migration of thousands to the West all contributed to an actual decrease in the population in the years following the war.

A total of 1.7 billion people from 61 countries (three-quarters of the Worlds population) were involved in the war.

#### The number killed due to the war

	Total	Military	Civilian
USSR	20 million +	13 million+	7 million
China	13.5 million	3.5 million	10 million
Germany	7.3 million	3.5 million	3.8million
Poland	5.4 million	120,000	5.3million
Japan	2 million	1.7 million	380.000
Yugoslavia	1.6 million	300.000	1.3 million
Romania	665,000	200,000	465,000
France	610,000	250,000	360,000
Great Britain &			
Commonwealth	512,000	425,000	60,000
USA	295,000	295,000	

These figures are not exact and may vary from different sources.

# Since the War ended



Most people suffered a drop in their standard of living after the war ended. Rationing did not end in Britain until 1953, 8 years after the war was over. Even so, conditions in Britain were very much better than those in Central and Eastern Europe.

In Britain, the war highlighted several things which needed to be improved. The condition of the young and old living in poverty was addressed with the introduction of pensions, free school meals and milk. The wartime diet had been better for some of the poorest people and their state of health was better than pre-war. The setting up of the Welfare State was a direct consequence of the war.

The role of women in society also came into question after the war as they had been taken out of the home and into the work place for the first time. Many who had worked in factories did not want to go back to being housewives but wanted to carry on working because it gave them some financial independence.

Another effect of the War on the populations was to speed up the process of urbanisation, particularly in the West. In the UK new cities outside London were developed such as Crawley.

The destruction of property, industry and agriculture was widespread. After the war there was a shortage of food throughout all of Europe. Almost 40% of livestock were killed along with the loss of immense areas of arable land, farm machinery and workers. In 1946 the United Nations reported that 140 million people in Europe were living on less than 2000 calories a day and of these 100 million were on less than 1500 calories.

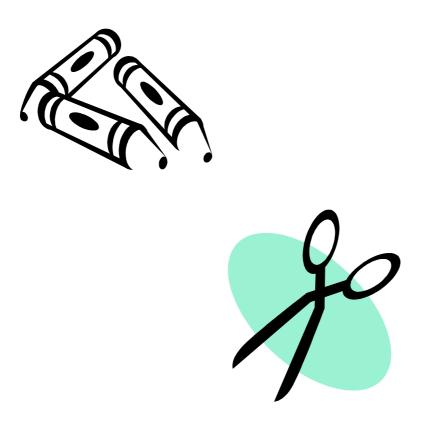
In industry there were shortages in manpower, raw materials and machinery. Many factories and other buildings were reduced to rubble. Coal production was down to 40% of the pre-war level and this contributed to the shortage of power.

Communications were difficult with roads, railways, rivers and canals impassible. Bridges had been destroyed as had many road vehicles, trains and ships.

Currencies throughout Europe suffered from inflation with Germany reduced to a barter economy where cigarettes and not cash were the main means of exchange.

# Activities

The activity pages within this pack are designed to be photocopied for use with the children both prior to and after a visit to the museum.



## Learning Objectives

Activity	Learning Objective	Resource
Show the children photographs of evacuees and talk to them about why they were evacuated. The children try to imagine how they would have felt as an evacuee, host family, billeting officer or as parents.	History Unit 9. To find out about the experiences and feelings of evacuees, from a wide range of information sources. To communicate their learning in an organised and structured way, using appropriate terminology. Literacy. Create, adapt and sustain different roles.	Literacy Starters: Evacuees during WW11, Evacuee Memories. (Information sheets pages 1-6)
The children have to decide what they would take in their suitcase if they were evacuated.	Citizenship, making decisions and explaining choices.	What would you take in your suitcase? (worksheet. Page 7)
The children write a short description of themselves to encourage a host family to choose them.	Literacy, writing, choose form and content to suit a particular purpose. Broaden their vocabulary and use it in inventive ways.	Why should a local family choose you? (worksheet. Page 8)
The children imagine they have been evacuated and write a letter home to their parents.	History Unit 9. To find out about the experiences and feelings of evacuees. Literacy, writing, choose form and content to suit a particular purpose. Broaden their vocabulary and use it in inventive ways.	Lesson Plan 1: Evacuee Letter Writing. (page 9)
The children will have chance at the museum to see the WW11 aircraft	Numeracy. Data could be collected at the museum ie how many propellers counted and converted into graphs back at school.	Information sheets on WW11 aircraft at the museum. (pages 11-16)
Whilst at the museum the children will take part in a WW11 Evacuee Session. (run by museum staff) They make gas mask boxes, fill out identity cards and experience an air raid!	History unit 9 What was it like for a child in WW11? When and why were children evacuated?	Lesson Plan 2: WW11 Evacuee Experience (page 17)
The children look at the 1940's house at the museum and fill out the worksheet.	History- Unit 9 an overview of how the war affected people's everyday lives.	Mrs Jenkins worksheet (to take to the museum. Page 19)
The children answer the questions about their visit to the museum.	Writing: to inform and explain. Sentence construction and punctuation.	Visit to RAF Museum Cosford. (worksheet. Page 21)
The children have to think about what	Citizenship, making decisions and explaining choices.	Anderson Shelter Box (worksheet. Page 22)

they would take to their Anderson shelter. They only have a shoe box. They have to draw and label what they would take.	Could be linked to Design & Technology unit 6a 'shelters'.	
The children fill in the missing words on the rationing sheet	History- why rationing was necessary	Rationing worksheet, rationing information (pages 23-28)
The children decide what they would like to buy with their coupons and stick their items into their cupboards	Maths- Ma 2 number Literacy - speaking and listening	Shopping on a ration (worksheets part 1 and 2), shopping on a ration cupboard and ration book (pages 29-37)
The children look at the kind of foods people ate in 1939 and fill in a typical day now.	History- the impact of rationing on the way of life of people living in England.	Think about what you eat (worksheet. page 37), recipes.
The children pretend they are the prime minister and have to choose what they would do first to protect their people.	Citizenship Developing good relationships and respecting differences between people.	September 1939 (worksheet. Page 38)
The children draw pictures to go with the sentences	History: communicate their knowledge and understanding of history in a variety of ways.	Draw pictures to go with the sentences (worksheet. Page 39)
The children find the words in the wordsearch	Reading: word recognition.	WW11 Wordsearch (worksheet. Page 40)
The children try to think of as many WW11 words they possibly can and complete the word chain.	History: communicate their knowledge and understanding of history in a variety of ways. Vocabulary extension.	WW11 Word Chain (worksheet. Page 41)

Evacuee Memories.

#### Roy Peel, 9years old when war broke out, lived in Birkenhead.

Evacuated to Weston, Shropshire with mother and siblings, not affected adversely by the war- it opened up a new world of countryside.

As a child I found the war exciting- delivered telegrams by bicycle without understanding the effect they may have had on the recipients.

#### P. Amscombe, 5years old when war broke out, lived in London.

Evacuated to Exmouth for 2yrs until a school mate was killed during an air raid as blitz had lessened in London parents bought us home. Stayed there during the rest of the war including V1 and V2 raids, had to go on the roof to watch v's flying.

#### Margaret Stead, 4 years old when war broke out, lived in Birmingham.

I can remember lying in bed and hearing the German planes overhead, you could always tell they were German by the heavy drone, caused by their load. After a while we spent our nights at my aunts in Harbourne (still mainly country then). We would watch the German planes bomb Selly Oak, every morning when we returned home more houses had been destroyed- luckily not ours.

I was evacuated at six with the school, every month a coach bought our parents to see us, the family with whom we were staying would have a meal ready and then my parents would go to bed for a couple of hours or so- it was about the only rest they had.

#### Mary Rosswhite, 10years old when war broke out, lived in Southampton.

Evacuated to Bournemouth only 30 miles away, so we went home alternate weekends. Half day schooling for three years as we had to share school with local girls, one week am one week pm.

Home to Southampton at the weekends when most of the bombing took place! Food was very scarce, but could buy of stale fairy cakes from baker for one penny.

#### George Gulliver, 6years old when war broke out, lived in East London.

I came home with my family from 'hopping' (hop picking) and found that the railings had gone and a big pile of bricks had been left. The bricks were for us to build a shelter with. We started building our shelter. We saw dog fights in the air and saw the flames from the planes when they were shot down. One day we heard a big roar and a spitfire flew down the street, you could have shaken hands with the pilot. Every time the siren went you ran down the shelter, you practically lived in the shelter, we didn't go to school.

A bomb came across the top of the street it knocked a chimney pot off and lifted my mothers chair two feet off the ground. After the raids my dad used to give us an Oxo tin, we collected shrapnel. The ARP came round with gas mask's, we tried them on but never had to wear them. They had baby 'gasmasks' that was like a crib with a pump on.

We moved to Coventry and was there when the cathedral got bombed. We could see the flames from where the we lived. We moved to Cornwall there was no bombing there. We moved back to London and me and my brothers and sisters were evacuated (we were split up) younger brother and sister went to Cambridge and I was evacuated to Leicester with one of my brothers. I was very unhappy and was moved about three times. I first went to a big mansion with just my brother and I in it, they were very strict,. I fell in a pond and was given bread and milk and put in the attic which was very frightening, for a week I cried every night. I then moved to another family, I got dermatitis and was sent to a skin hospital when I came out I was moved again to another big mansion with lots of children in, they parted me and my brother. At times I was happy and at times I was very unhappy, we were sent potato picking and fruit picking.

After VE day I paid my own fare and went back to London my dad wasn't there to meet me so they took me to a police station and I was given a big mug of tea and a slice of bread and dripping. Soon it was VJ day and the end of the war.

#### Barbara Mason, 8years old when war broke out, lived in West Kirby

'What is war mum?' I asked after hearing Neville Chamberlain's speech on the wireless. No reply came and I could see that my mother and father looked stunned by the news. Everything began to change. A shelter was erected in our road but no one used it as it soon got damp and smelly. We tried on our gas masks- horrible-the visor steamed up and I felt panicky. Evacuees came from Liverpool. My mother took in 4 girls which we hadn't got room for and they went back the next day. The 4 who were sisters left their 'calling-cards' of head lice and my mum spent ages de lousing us. Two boys came. One went home after a few weeks as he was homesick but Billie stayed for a couple of years.

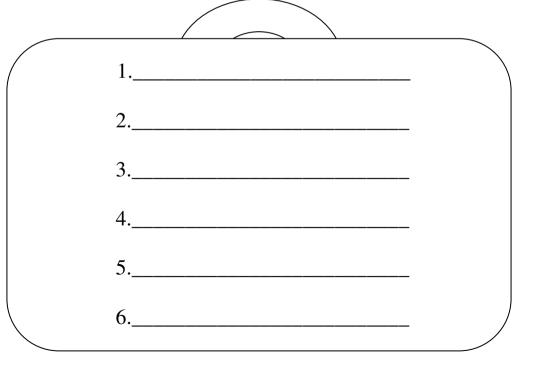
When the siren went at school we all trooped down to a shelter built on the school garden. The boys helped to 'dig for victory' and the vegetables went to the school canteen. I remember singing songs in the shelter. When the bad raids came in 1940/41 over Liverpool, Birkenhead and Wallasey, my mother bought us downstairs and we hid under the table in the kitchen, giggling all the time. Concrete blocks called 'dragon's teeth' appeared along the shore to supposedly stop tanks in case of invasion. We children collected 'window' (silver paper strips) dropped by aircraft to confuse radar, shrapnel where shells had landed and salvage- waste paper. To me as a child the war was an exciting time!



## What would you take in your suitcase?

Imagine you are being evacuated to the countryside. You only have a small suitcase to take with you. Choose six items from the list to pack into your suitcase.

- 1. Clothes
- 2. Photograph of your family
- 3. Pocket Money
- 4. Sweets
- 5. Identity Card
- 6. Gas Mask
- 7. Postcard (to write home)
- 8. Favourite book
- 9. Teddy Bear
- 10. Ration Book



## Why Should a local family choose you?

Pretend that you are an evacuee. On the luggage label below write a short description of yourself and why a local family should choose you to live with them.

		Name	Class
		Description	
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### Lesson Plan 1: Evacuee Letter Writing

Teacher;		Year Group:	Date:	Duration: 1 hr	Curriculum Area: Literacy/History
Class No:	Boys:	Girls:	Teaching Assi	stants (Others):	
Lesson Context/Prev	vious Experience	Prior to visit to R	AF Museum Cosford.		
evacuated? Section	4:- To find out about	hat was it like for a child the experiences and feel ir learning in an organised	ings of evacuees, fro	m a wide range of photogra	es: Evacuee information, aphs, pencils, paper
Lesson Structure	Activities				
Introduction		ns about evacuees. Ask th		vacuated during WW11. With t the questions using selected s	
Development	they might want	to be evacuated and why	not, what is happenir	etter home to their parents. A ng to them and how they feel a terms eg host family, evacuati	bout it. Encourage the
Plenary	Discuss with the	children what they have	written and ask some	e of the children to read their	letters to the group.

Next Steps: Visit to	RAF	Museum Cosford				
Special Needs: Teach	ning a	ssistant support.				
Pupil grouping		Support				Differentiation
Class Group		Pupil initiated	5	Outcome	J	Higher ability- Independent
Ability Group	5	Teacher	Г	Research		— writing Middle ability-
Mixed Ability Group		Student		Task		Lower ability- Teaching Assistant support
Pairs		Teaching Assistant		Interest		
Individual	J	Adult		Support	J	
ICT:	<u> </u>			]	I	1
Cross curricular links	: Cit	izenship, Literacy				
Evaluation:						



The German Air Force, or Luftwaffe, used the Storch in many parts of the World during World War Two including the Arctic, the Western Desert, the Eastern Front and in Europe. The Storch could take off and land over a very short distance. This made the



aeroplane very useful as it could be flown from very small airstrips. The Storch was used to rescue the Italian leader Mussolini from the Italian mountains and took General von Greim to a meeting with Hitler in the last days of the war.



Hawker Hurricane (1937 – 1946): Hangar 3



The Hawker Hurricane was the main aircraft of RAF Fighter Command during the Battle of Britain. The Hurricane moved very well and was a very good fighter aircraft. It destroyed more German aircraft than all other British defences put together, including many

German bombers. The Hurricane was also used in Northern Europe, North Africa and the Far East.



#### Supermarine Spitfire I (1938 – 1945): Hangar 3

The Spitfire played a very important part in defeating German air attacks during the Battle of Britain in 1940. There were nineteen Spitfire squadrons in July 1940. Like the Hawker Hurricane, these aeroplanes were fitted with Rolls Royce engines. They were very fast and were used to attack German fighter aeroplanes.



In fact, the Spitfire was so good that Adolf Galland, a famous German pilot, once asked the head of the Luftwaffe for a squadron of British Spitfires to help Germany win the Battle! The one on display at the Museum is the oldest Spitfire in the world.



#### Consolidated Catalina (1939 – 1945): Hangar 3

The Catalina or 'Cat' is an amphibious aircraft. This means it could take off on water, as well as on land. This type of aeroplane was first used by the United States Navy, but it was the Royal Air Force that gave them the name 'Catalina'. The RAF's Cats played an important part in the Battle of the Atlantic, sinking almost 30 German submarines. They were also used to patrol the Indian and Pacific Oceans and supported the Allied landings in North Africa.



The Catlina on display here was built in April 1945. It was used by the US Navy until it went to the Royal Danish Air Force in 1957. It was used to rescue submarine crews and was once damaged in a collision with an iceberg.



#### North American Mustang (1941 – 1946): Hangar 3

The Mustang was one of the best fighter aircraft built during the Second World War. Its engine was designed in the UK, although the rest of the aircraft was designed in the USA. It could fly over long distances and was used to escort allied bombers as far as Berlin and back. They played a large part in controlling the skies over Germany. It was Herman Goering, the Head of the Luftwaffe, who said 'When I saw the Mustangs over Berlin I knew the war was lost'.





#### Mitsubishi 'Dinah' (1943 - 1945): Hangar 3

This Japanese aeroplane was given the codename 'Dinah' by the Allies. It was very fast and could also cover large distances. The 'Dinah' was excellent at taking high altitude photographs of Allied movements. It was so succe



movements. It was so successful that Germany wanted to make their own versions of the aeroplane.



Messerschmitt Hornisse (1943-1945): Hangar 3



The Germans used these aeroplanes as fighters, light bombers and anti-shipping aircraft. They were used in the 'Baby Blitz', a series of raids on the UK which happened in 1943 and 1944. An interesting feature of the Hornisse are its defensive

gun turrets on each side of the fuselage. These are called 'barbettes'.



#### De Havilland Mosquito (1941 – 1963): Hangar 3

This bomber aircraft was known as 'The Wooden Wonder'. Some versions had no weapons and relied on their speed and ability to fly at over 40,000 feet to escape enemy fighters. However, other versions of the plane had cannons and machine guns mounted in the nose, like the Molins gun.



During the war the Mosquito was used for lots of different purposes. Coastal Command used them in rocket attacks on enemy shipping and their version of the aeroplane had rockets mounted underneath the wings. Mosquitoes were also used for pinpoint raids on Gestapo offices.





This Japanese aircraft was built towards the end of the war. They would have been flown by Kamikaze, or suicide, pilots. The Ohka was designed to be carried and launched from a 'Mother' aircraft and glide as far as possible before making a final, rocket powered,

approach to its target. During the battle for Okinawa in 1945, 355 Kamikaze pilots attacked American ships at the same time, sinking 5 of them.



V1 (1944 - 1945): Hangar 1



The V1 was a flying bomb, the world's first cruise missile. The first ten were launched against London on 13 June 1944. By 29 June, up to 2,000 had been launched, but only <sup>1</sup>/<sub>4</sub>

actually reached their target. On Christmas Eve 1944, a V1 launched at Manchester exploded just east of Newport, In Shropshire. Many buildings in the town were damaged, but the only fatalities were a rabbit and a frog!

The vibration made by the V1s engine led to the infamous 'buzz-bomb' noise which would suddenly stop when the V1 was over its target. At least 29,000 missiles were produced although the heavy attacks Hitler wanted to happen never took place.



The V2 was as a mobile weapon which was moved by rail. These rockets could be readied for launch within 4 hours. The first V2 to hit Britain landed at Chiswick at 6.43pm on 8 September 1944. About 10,000 V2s were produced, but only about 3,000 were ever launched offensively. The final rocket launched against the UK crashed in Orpington, Greater London, on 27 March 1945.





Avro Lincoln B2 (1945 – 1963): Hangar 3

The Avro Lincoln was developed at the very end of World War Two. It was a bigger version of the famous Avro Lancaster, the main heavy bomber used against Nazi Germany.

(on display at the RAF Museum, Hendon)



The RAF planned to use Lincolns to bomb Japan, but the war ended before they were needed. However, the Lincoln was used as a front line bomber until the mid 1950s and was used in radar development until May 1963.



## Mrs Jenkins' house in September 1940

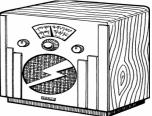


It is early evening and in the distance an air-raid is starting. Mrs Jenkins is about to make her way to the shelter. Mr Jenkins is an air- raid warden and he is out on his bicycle.

Look at Mrs Jenkins' room. Is it different to your living room? How?

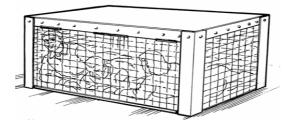
This was the main form of entertainment and an important way of getting news for Mrs Jenkins.

Is this still true today or do we use something different?

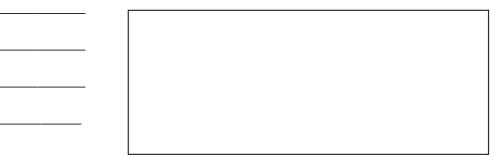


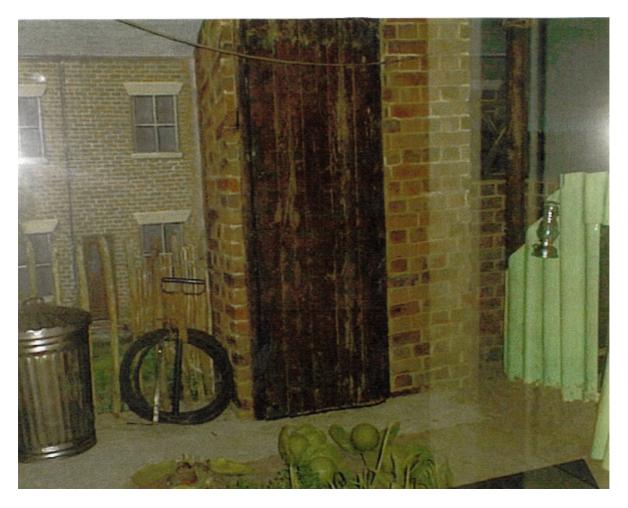
This is a Morrison shelter. It looked like a table and you had it

in the house. Mrs Jenkins does not need one of these because she has an Anderson shelter in the garden.



Draw the Anderson shelter in Mrs Jenkins' garden. List some of the things you would need if you had to spend the night in there





The wooden door at the back of the garden is an outside toilet. What must it have been like to go out at night in the winter?

Down at the bottom of the hill in Hangar 1 you can see the two rockets that were used by the Germans during the London Blitz. Find out some interesting facts about them.

### **Rationing**

#### When was rationing used?

It was first used at the end of WWI as a system of making sure everyone had a fair share of the limited supplies available.

Introduced in WWII from the 8<sup>th</sup> Jan 1940 - 1953

#### Why was it introduced?

Britain imported two-thirds of its' food. Ships were increasingly in danger of being targeted by U - boats and were also needed for other duties.

#### How was it implemented?

Sept 1939 the Ministry of Food was created to implement rationing nationally. Each householder had to register the names of all the people living in their house. Local Food Offices used this information to prepare Ration books. People had to then register with the grocer and butcher they intended to use to buy their rationed food.

#### What was rationed?

The first foods to be rationed were butter, sugar, bacon and ham. This was extended to all types of meat in March 1940. By July tea, cooking fats and margarine were all being rationed and the weekly allowance for sugar was cut.

A points system was introduced in 1941 which allowed people to spend 16 points per month on luxury items such as dried fruit, biscuits, cereals, tinned fish and meat. The weekly allowance varied during the war depending on what foods were available.

#### How did people cope?

People adapted to the rationing system by changing the way they cooked and ate. The Ministry of Food published recipe booklets and information on new ways to cook were given over the radio. People were encouraged to dig up their gardens to grow their own vegetables and generally become more self sufficient. Farmers were encouraged to plough fields rather than keep live stock as cereal crops could feed more people. As fruit was not always available people were encouraged to eat more green vegetables. The Ministry of Food encouraged people to eat more potatoes as this meant they were eating less bread this meant less wheat was imported to make flour. Even the skins were used as pig food.

#### Did people eat anything unusual?

Diets changed and to get around the ration people ate more unusual things. Powdered eggs were introduced in 1942.

People were allowed one twelve egg packet every four weeks, they were only given one shell egg per week (or fortnight depending on the availability). In 1941 Britain began to import corned beef and spam from America. More unpopular meats included whale meat and barracuda (called snoek) which were introduced during the last year of the war.

In the Channel Islands people collected and ate carrageen moss (a seaweed) to substitute their diet.

#### Did peoples health improve because of rationing?

The health of the nation had been poor in general at the beginning of the war because of the economic depression of the 1930s when there had been large scale unemployment. The War helped to keep food prices low enough for everyone to be able to afford a healthier diet. Rationing helped to improve peoples' diets as it stopped people eating fatty foods such as cheese, butter, lard, meat and biscuits and forced them to eat more fruit and vegetables. Children's diets improved as a 'Vitamin Welfare' scheme began in December 1941 issuing free blackcurrant juice and cod-liver oil to children under 2. Schools began to provide meals during

the war. Free milk was provided for all pregnant women and children under 5 whose families earned less than £2 per week.

#### When did rationing end?

The war ended in 1945 but rationing continued. Immediately following the war came a severe winter and a lack of food world wide. In 1946 the weekly ration for margarine, butter and cooking fat was cut to less than the wartime allowance. In July 1946 bread was rationed and by 1947 even potatoes were put on ration. It was only nine years after the war finished that rationing was eventually stopped in 1953.

#### A Weekly Ration For An Adult.

4oz (100g)	Bacon or Ham
1s 2d (£1.50 toda	ay)Worth of Meat (including offal and/or sausages)
2oz (50g)	Butter
2oz (50g)	Cheese
4oz (100g)	Margarine
4oz (100g)	Cooking Fat
8oz (225g)	Sugar
2oz (50g)	Теа
12oz (350g)	Sweets every 4 weeks
1lb (450g)	Preserves every 2 months
1 Shell Egg per w	veek (at times 1 per fortnight)

1 Packet Dried Egg every 4 weeks

#### **Rationing**

#### Suggested activities:

- Copy and fill in the missing words. R...... happened in the Second World War. People swapped pieces of p..... called coupons for f..... and c..... People were only allowed a s.... amount of food because there was not a lot to go around.
- Draw a picture of the food each person could have in one week using their ration book.
  Write how much of each they could have

Write how much of each they could have.

> Draw a 'Dig for Victory' poster. Write two sentences about it.

#### > Copy this:

These things were put on ration during the war:

b.....(edra)

c.....(lothse) s.....(poa) s.....(grau) s.....(setwe) b.....(naco)

Answer these questions:

- What items other than food and clothes were in short supply and therefore rationed during the war?
- > Why did Britain need rationing?
- > Who needed a ration book and were all ration books the same?

#### **Pathfinder Pudding**

Cooking time: 2 hours Quantity: 4 - 6 helpings

#### SUET PASTRY

6oz	national flour
1/2 teaspoon	salt
<sup>3</sup> ⁄ <sub>4</sub> teaspoon	baking powder
1oz	suet chopped or grated
1 ½ oz	uncooked potato, shredded
water	

#### **FILLING**

2 lb	cooked, diced parsnips
4oz	grated cheese
1	uncooked leek, sliced
1/2 teaspoon	mustard powder
pepper	
1 teaspoon	salt

#### METHOD:

Mix the flour, salt and baking powder add the suet, potato and water to bind. Roll out three-quarters of the pastry to line a 2 pint greased basin. Mixing the parsnips, cheese, leek, mustard, pepper and salt together. Put into the lined basin. Roll out the remaining pastry to form a lid. Put this onto the pudding, cover with an upturned saucer or greased greaseproof paper and steam for 2 hours.

#### **Corned Beef Rissoles**

Cooking time: 20 minutes

Quantity: 2 - 3 helpings

4 oz	corned beef
¹⁄₂ lb	mashed potatoes
¹⁄₂ lb	cooked mixed vegetables
4 oz	wheatmeal breadcrumbs
4	tablespoons brown sauce or vegetable
water	
seasoning	
pinch mixed l	nerbs

#### METHOD:

Flake the corned beef and mix with the mashed cooked vegetables and breadcrumbs. Season and add the mixed herbs. Bind the mixture with sauce or vegetable water, form into shapes. Bake in a quick oven.

#### **Carrot Cookies**

Cooking time: 20 minutes

Quantity: 12 - 15 cookies

1 tablespoonmargarine2 tablespoonssugar4 tablespoonsgrated raw carrot6 tablespoonsself-raising flour orplain flour with ½ teaspoon baking powderA few drops vanilla flavouring

#### METHOD:

Cream the fat and sugar together until it is light and fluffy. Beat in the flavouring and carrot. Fold in the flour or flour and baking powder. Drop spoonfuls of the mixture into small greased patty pans. Sprinkle the tops with sugar and bake in a brisk oven for about 20 minutes.

#### **Banana Cream**

Preparation time: 20 minutes

Quantity: 4 helpings

3	large bananas
2 tablespoons	cold water
<sup>1</sup> / <sub>2</sub> oz gelatin	e
<sup>1</sup> /4 pint	custard
<sup>1</sup> / <sub>2</sub> pint	evaporated milk, whipped
sugar to taste	

#### METHOD:

Mash the bananas until a pulp. Pour the water into a basin, add the gelatine and allow to stand for 2 minutes then dissolve over hot, but not boiling water. Add to the warm custard with the bananas, blend together. Leave in a cool dark place until the mixture begins to stiffen then fold in the whipped evaporated milk with sugar to taste. Spoon into glasses and chill well.

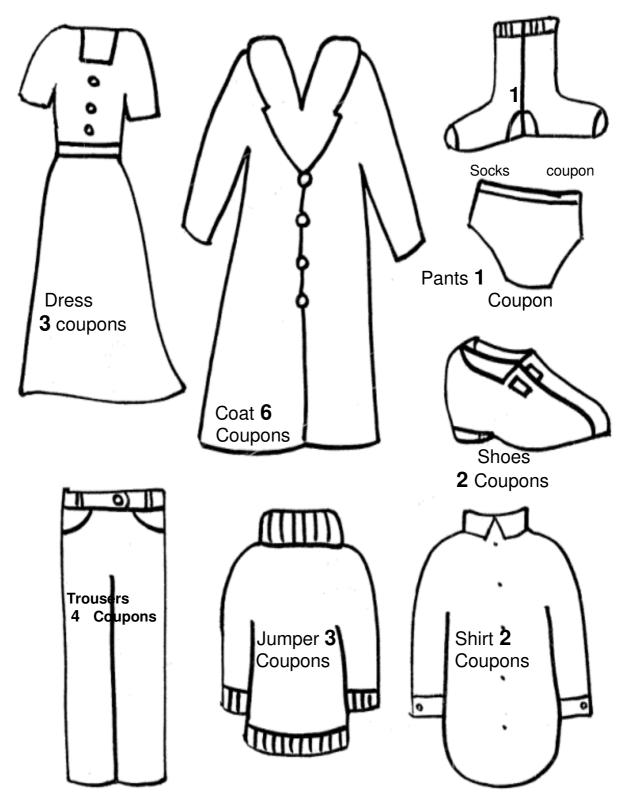
## Lesson Plan 3: Shopping on a Ration

Teacher;		Year Group:	Date:	Duration	1 hr	Curriculum Area: History/ Numeracy
Class No:	Boys:	Girls:	Teaching Ass	Teaching Assistants (Others):		
Lesson Context/Prev	ious Experience	Follow up to RAF /	Museum visit.			
evacuated? Section 5 of rationing on the w	History – unit 9 What wa What did people eat dur ay of life of people living Literacy – speaking and li	ing the war? Why ra in England.		•	worksheets cupboards	Shopping on a Ration 1 and 2, ration books, (pages29-37 of this ils, crayons, glue
Lesson Structure	Activities					
Introduction	rationing meant that Discuss with them wh	Discuss the activity and remind them that during WW11 there was not enough food and clothing to go round so rationing meant that everyone had some Discuss with them why this was the case Explain that they are going to be issued with a ration card and they can choose what to food and clothes they would				
Development	All the children beco worksheets) The children decide v	me shoppers. They al vhat they would like clothing. They need t	to buy using their cc o cut out what they	upons. They have 12 o	coupons to sp	

Next Steps:						
Special Needs: Teach	ning a	ssistant support.				
Pupil grouping		Support				Differentiation
Class Group	ſ	Pupil initiated	ſ	Outcome		Higher ability-
Ability Group		Teacher	Г	Research		— Middle ability- Lower ability- Teaching
Mixed Ability Group		Student		Task		Assistant support
Pairs		Teaching Assistant	ſ	Interest		
Individual	5	Adult		Support	J	
ICT;						
Cross curricular links	: Cit	izenship, Literacy				
Evaluation:						

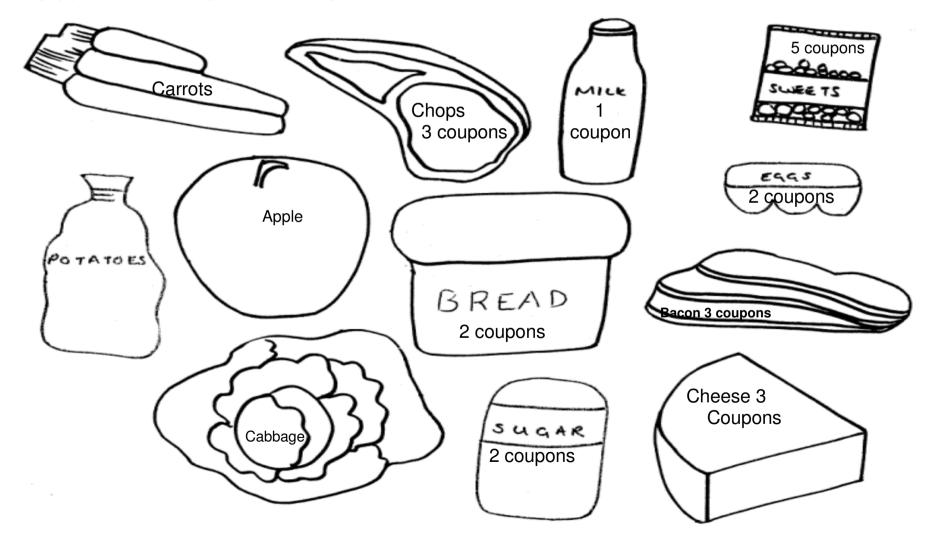
#### Shopping on a Ration (Part 1- Clothes.)

You need a cupboard, ration book, scissors and a pencil before you start. Choose the clothes you would like to buy. You **ONLY** have 12 coupons to spend so use them wisely. Photocopy this page and then cut out the clothes you have chosen and stick them into your cupboard. Make sure you cross off the coupons you have used in your ration book.

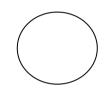


#### Shopping on a Ration (Part 2- Food.)

You need a cupboard, ration book, scissors and a pencil before you start. Choose the food you would like to buy. You **ONLY** have 12 coupons to spend so use them wisely. Photocopy this page and then cut out the clothes you have chosen and stick them into your cupboard. Make sure you cross off the coupons you have used in your ration book. Carrots, cabbage, apples and potatoes are free because you would have dug up your flowerbeds and grown them in the garden.



## Shopping on a Ration Cupboard



This Ration Book belongs to

\_\_\_\_\_

This Ration Book belongs to

\_\_\_\_\_

This Ration Book belongs to

\_\_\_\_\_

This Ration Book belongs to

Food					
1	2	3			
4	5	6			
7	8	9			
10	11	12			

	Clothes		
1	2	3	
4	5	6	
7	8	9	
10	11	12	

Food		
1	2	3
4	5	6
7	8	9

10

11

12

1	2	3
4	5	6
7	8	9
10	11	12

Food

1	2	3
4	5	6
7	8	9
10	11	12

1	2	3
4	5	6
7	8	9
10	11	12

Food

1	2	3
4	5	6
7	8	9
10	11	12

Clothes

1	2	3
4	5	6
7	8	9
10	11	12

Think about what you eat				
In 1940		In 200_		
Breakfast	<i>Porridge with milk but no sugar</i> Tea	Breakfast		
Lunch	Corned beef with cabbage Apple & blackberry roll made with potato pastry	Lunch		
Теа	Bread and Jam or dripping if you have no home made jam and milk to drink	Теа		
Snacks and extras	Apple or pear and Carrot cookies	Snacks and extras		

#### September 1939

You are a member of His Majesty's Government. It is September 1939 and war has been declared. Bombs and gas attacks are expected.

Look at the measures below.

- 1) For each one write a list of its advantages and disadvantages.
- 2) Cut out the cards.

3) Put them in an order of priority- which one would you do first.

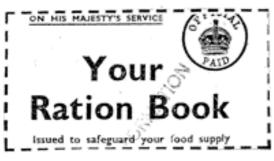
Be prepared to explain your choice.



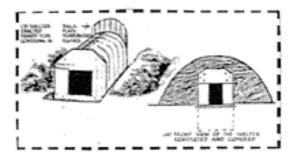
a) Evacuate women and children from areas that may be bombed



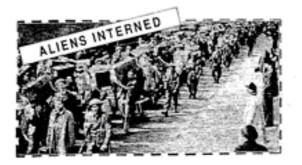
b) Issue gas masks to every person



c) Ration food



d) Distribute air raid shelters to every household



e) Put in prison any German citizens who are living in Britain



f) Censor newspapers

### WWII Word Chain

Look carefully at the word chain below. All the words have something to do with WWII.

This word chain has been started with the words WORLD WAR TWO.

More words have been added on by choosing different letters.

Continue the word chain by adding as many WWII words as you can.

WORLDWARTWO A T AIRRAID O N P I LOT N G

#### Anderson Shelter Box.

Think about the time you spent in the Anderson shelter at the museum. Try to remember how you felt inside there.

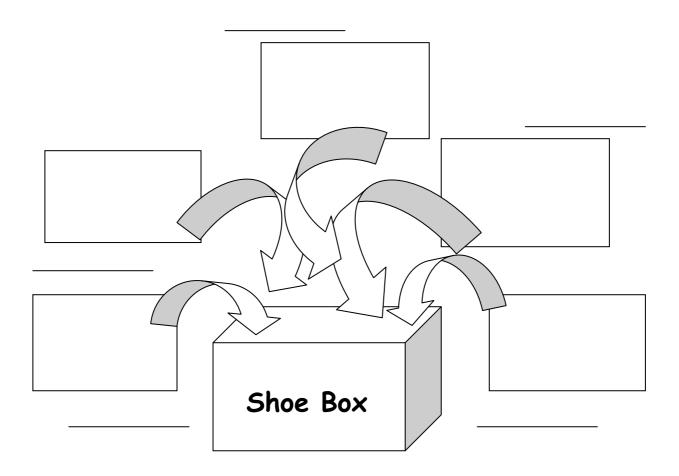
You never know how long you will have to wait in your shelter for the all clear. Because there is not much room you are only allowed to take a shoe box for your belongings.

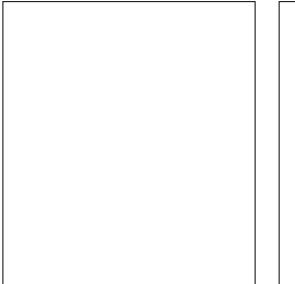
What would you take with you?

You need to think about

Is it warm or cold in there? What toys could you take (did they have computer games during the war?) Food to eat (remember the rationing)

Draw and label the items you would put into your box in the space below.







The Anderson shelter was cold and dark	The party was enjoyed by everyone on V.E. Day.					
A Spitfire chased the German plane through the clouds	The boy lay under the Morrison shelter.					

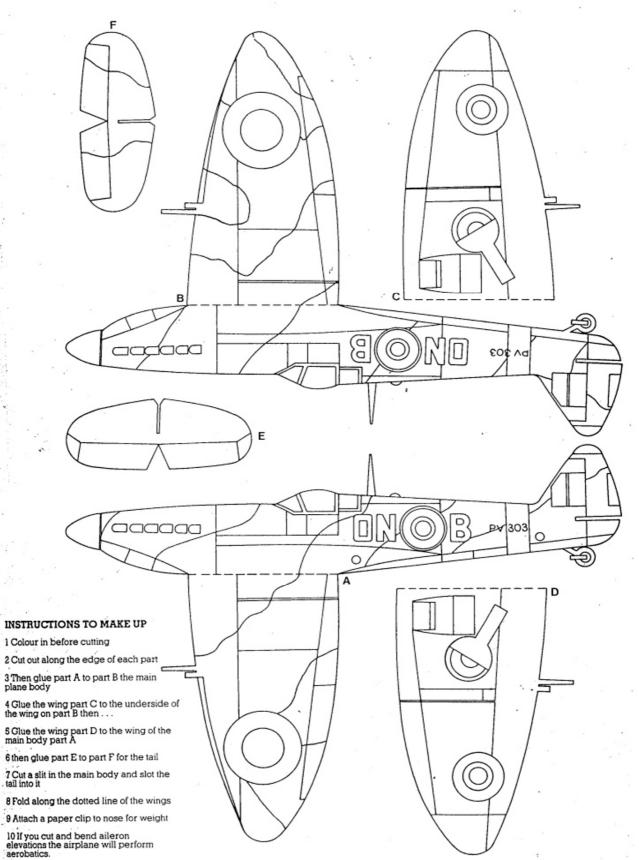
## WW11 Wordsearch.

Can you find the following words in the grid?

	-					-								
C	G	F	J	K	F	D	A	D	Z	J	J	1	U	N
F	R	A	S	Q	L	F	S	l	A	N	Н	A	K	0
G	X	J	0	N	Н	U	F	Α	K	E	Х	M		S
Н	D	N	R	G	0	W	В	R	0	Н	V	Ρ	L	R
L	В	P	W	J	0	1	Х	R	C	E	Н	J	Κ	E
0	L	$\circ$	J	G	R	R	Т		Ρ	Т	S	Α	J	D
В	Α	R	R	А	G	Е	В	А	L	L	0	0	N	G
	С	Ζ	0	S	W	Н	Y	Μ	R	D	Ρ	S	M	Α
Н	K	N	0	М	Ο	R	R	1	S	0	Ν	E	Х	Q
K	0	Н	Ρ	А	L	W	Т	D	J	U	1	E	V	W
Μ	U	G	L	·S	Н	E	L	Ţ	Ε	R		U	D	K
В	T	Т	В	K	0	R	U	l	Μ	D	Y	С	G	J
C	R	Μ	G	I	А	Y	Κ	L	F	Н	M	Α	S	T
Ζ	0	I	K	Y	Е	Т	А	Q	Е	W	T	$\vee$	R	R
В	F	В	D	R	А	С	Y	T	1	T	N	E	D	I

#### Words to be found in this World War II wordsearch:

evacuees gas mask shelter Anderson Morrison rations barrage balloon blackout identity card air raid bombs VE Day



.

Here are some suggestions for further activities:

- Make a small model of an Anderson shelter
- Draw and paint WWII aeroplanes seen at the museum
- Design a poster to promote the WWII Evacuee Experience at the RAF Museum Cosford
- Plan a well balanced meal using your rations
- Collect data at the museum to be converted into graphs back at school