

Activity Book for Schools 9

# Horsepower

## - A Military Technology



This is a picture of a sabretache, a kind of pouch worn by cavalry soldiers as part of their uniform. The sabretache hung on long straps from the belt and was originally intended to hold messages and notes. Soon it became the symbol of cavalry, soldiers who fought on horseback.

### Fighting Sitting Down

**Cavalry – soldiers trained to fight on horseback**

**Infantry – soldiers trained to fight on foot**

**My Name:**

# Your Briefing

For hundreds of years, until the 20th century, army horses were an important part of military technology but there is relatively little evidence of this in the historical record – or in the *Soldiers and Chiefs* galleries. You are going to scout the exhibition to:

- Uncover the many ways that armies used horses over time
- Find out when and why the army stopped using horses as a military technology
- Discover the technology that replaced horses in the army.



**Enter the first room after the introduction space.**

For classroom discussion after the museum visit, your teacher has *Teachers' Notes* with answers to the questions in this book.

# How Armies Used Horses – in 'The British Garrison in Ireland'

Tick here when you find the example in this gallery of how armies used horses

- ☐ For cavalry soldiers to ride in the battlefield
- ☐ To bring supplies to the army and to carry them on the march
- ☐ In military ceremonies and reviews

## 1 **Stabling the Horses** – Stop at the first display on the right.

Find two clues on the model and the plan of the Royal Barracks that suggest the importance of horses to the army.



### Ready to Ride

The stables were on the ground floor of the building around Horse Square and the living quarters for the cavalry soldiers were on the first floor above the stables. This made for a short commute to work, but the smell upstairs would have been difficult to get used to!

## 2 **Barracks Across Ireland** – Stop in front of the map at the next display on the wall.

Examine the military map of Ireland from 1822 to locate the barracks that housed the British cavalry during the 18th and 19th centuries.

How many barracks housed only the cavalry?

How many barracks housed both cavalry and infantry?

What does the number of cavalry barracks tell you about the importance of horses to the army in the 19th century?

### Barracks for Cavalry

Until the 1840s the British Army distributed most cavalry soldiers in small groups in towns all over Ireland so they would be on the spot if trouble broke out. Because this led to discipline and training problems, the army built barracks to concentrate their cavalry soldiers in a few major places.

## 3

**Short Tails and Tall Hats** – Cross in front of the exit and stop at the first display to the left.

In the display 'Part-Time Soldiering', find the cloth hanging at the back of the case. It shows scenes with army horses in a military review.

**Cut Tails**

Some senior officers in the British Army liked the look of short tails and ordered that cavalry horses' tails be cut or 'docked'. However docked horses could not use their tails to get rid of annoying flies. Docking of horses' tails in the British cavalry ended in 1845.

How many army horses have had their tails cut short or 'docked'?  
What do you think of this practice?

**A Towering Soldier**

Now look in the same display case for the Ennis helmet. Cavalry soldiers wore tall helmets like this one with a decorative crown.



What was the purpose of such a tall, fancy helmet?

## 4

**Cavalry in Action and on Show** – Stop at the big display in the middle of the room.

Look at the Stokes Tapestry to find cavalry soldiers using weapons.

To use a weapon on horseback, the soldier had to take account of the movement of his horse. Lance: it only works if the horse is moving: it's useless if the horse is stopped.

Sword: it is effective both when the horse is moving and when it is at a standstill.

Firearm (carbine or pistol): it is only effective when the horse is still or walking slowly; otherwise it's too hard to aim.

What weapons do the soldiers on horseback use?

**Hint:** Look for army weapons on your 'Military Speak' glossary.

Now find the scene showing a military review of cavalry. Who do you think are the woman and children on horseback?



**Enter the next room.**

# How Armies Used Horses - in 'Warfare in Ireland'

Tick here when you find the example in this gallery

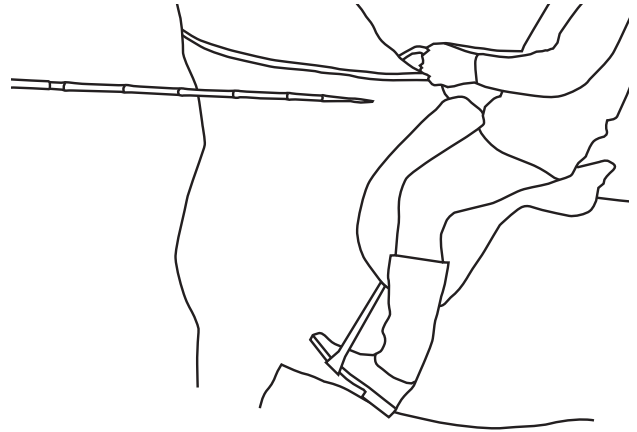
- ☐ For cavalry soldiers to ride in the battlefield
- ☐ To haul artillery from place to place and to move guns during battle

## 5 For the Want of a Stirrup – Turn left at the doorway and stop at the first display.

Look for the boot and spurs. Stirrups hang from a strap on each side of a horse's saddle. They can make a crucial difference to a cavalry soldier who attacks an enemy cavalryman with a lance.

If this rider is struck by the lance, his stirrup will keep him steady. Draw a line on the rider to show the force of the blow from his chest to his foot in the stirrup.

What would happen to him if he did not have stirrups?



### Stirrup Support

The English won the Battle of Kinsale in 1601, partly because their cavalry had stirrups but the Irish cavalry did not.

## 6 Cromwell's Cavalry – Stop at the next display along the wall.

Look for a yellow uniform in a display case. The cavalry of the British Army wore this kind of outfit. Examine the horseman's gear to discover some of the reasons why he was a formidable enemy.

How did this uniform not only protect the soldier in battle, but also allow him to ride his horse comfortably?



1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Examine his pistol and carbine (a short version of a musket). Why do you think the handle of the pistol is shaped like a ball?

What might be the purpose of the ring on the carbine?



**As you walk to the displays on the other side of this room, look at the large black and white sketch of a battle on the wall – many horses also suffered and died in battle.**

**7**

**Getting Information** – Cross the room to the opposite wall and stop at the displays on the far left.

Look for the small 'secret' helmet in the display about the 'War of the Two Kings'. The cavalry rode on scouting expeditions to discover useful information about the enemy.

How was the secret helmet worn?

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What was its purpose?

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**8**

**A Sharp Cut** – Stop at the next display on the right.

Find the Yeomanry cavalry officer's coatee (jacket) and sabre in the display about the '1798 Rebellion'.

How is the shape of the officer's coatee suitable for riding on a horse?

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Describe the shape of the Light Cavalry Sabre.

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How did the mounted soldier use this sword to attack the enemy?

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To find a picture of this kind of sword used in battle, look on the panel to your left ('The 1798 Rebellion'). Beside the topic 'An Unequal Contest' there is a detail of the painting 'Scene from the Rebellion, 1798' by William Sadler.

**9**

**Cavalry and Cannon** – Stop at the big cannon.

On the panel called 'Cannon in 1798', look at the picture of a battle between the British soldiers and the Irish rebels. In the left background, you can see the British cavalry charging the enemy's infantry.

Examine the cannon in the foreground of the painting and compare it to the real cannon in front of you.

How did such a heavy piece of artillery get to the battlefield?



Leave through the doorway, walk past the row of helmets and enter the next room.

## How Armies Used Horses – in 'The Wild Geese'

Tick here when you find the example in this gallery

☐ For cavalry soldiers to ride in the battlefield

**10 Speed and Distance Matter** – Turn right at the doorway and stop at the display in the corner.

Find the cavalry pistols and sword in the display 'Irish Regiments in the French Army'. Cavalry soldiers were trained to control the speed of their horses in order to attack the enemy.

These words describe the speed of a horse, from slow to fast.



There were two ways to charge – charging to use the pistols and charging to use the sword.

Draw a line from the name of the weapon most suited to the kind of charge.

**sword**

controlled canter, stopping about fifteen metres from the enemy

**pistols**

gradual increase of speed to a full gallop as the horse crashes into the enemy



Enter the next room.

## How Armies Used Horses – in 'Irish in the American Civil War'

Tick here when you find the example in this gallery

☐ For cavalry soldiers to ride in the battlefield

**11 Designed for the Cavalry** – Turn right at the doorway and stop at the display in the corner.

Look closely at the Spencer Repeating Rifle in the display 'Irish in the Union Army' and read the object label.

Name two things that make this a good weapon to use when riding on horseback.

1. \_\_\_\_\_
2. \_\_\_\_\_

### Long Distances

The army used cavalry horses to cover the vastness of the American landscape in both the Civil War and Indian Wars during the 1800s.

## 12 Get a Good Grip – Cross the room and stop at the display to the right of the exit.

Find the rifle in the display beside the panel 'A Tradition of Service'.

How could you ride a horse and shoot this rifle at the same time?

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If you fell off the horse would you lose your rifle?

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### A Famous Irish Cavalryman

Captain Keogh was an Irish cavalryman (the 7th Cavalry Regiment) who fought, and died, at the Little Big Horn – his horse, Comanche, was the only survivor of the battle. Keogh had previously served in the Papal Army. Look at the display called 'Defending the Pope' for more information about the Papal Army.



Enter the next room, turn right and then through into the big space.

## How Armies Used Horses – in 'Irish in the British Service'

Tick here when you find the example in this gallery

- ☐ As transportation for infantry soldiers
- ☐ For cavalry soldiers to ride in the battlefield

## 13 Horse Code – Stop at the display in the middle of the wall on the right.

The ornate jacket in the display 'Anglo-Irish Officers' belonged to an officer of an Irish Cavalry unit in the British Army. He would have used scouts to find out about enemy forces before a battle. As long as he could see the scouts through his telescope, the scouts could signal him what they discovered about the enemy.

### The Secret Code Is –

If the scout sees enemy **infantry** > he moves his horse in a **clockwise** circle

If the scout sees enemy **cavalry** > he moves his horse in a **counter-clockwise** circle

If the enemy force is **small** > he moves his horse **slowly**, at a walking pace

If the enemy force is **large** > he moves his horse **faster**, at a canter

### You Are the Officer – This Is the Situation

The enemy force is out of sight over the next hill. Your scout is at the top of the hill to discover the strength and composition of the enemy force.

First your scout rides his horse at a canter in a clockwise circle.

Next he moves in the opposite direction at a walking pace. What does he see?



14

**Mounted Infantry** – Follow the arrow on the floor to the last display panel in this room.

During the Boer War, the army trained many foot soldiers to use horses to move quickly across the wide open spaces of South Africa, and then **to dismount to fight**. They usually operated in groups of four, like this. Why?

**Hint:** Look at what the soldiers are doing in this drawing.



### Horses Transporting Infantry

This new tactic shows how the army tried to adapt the use of horses to the weapons being developed at the time. A man on a horse was a giant target for the newly accurate rifles, which could kill at a distance of a kilometre or more.



**Leave this room and stop on the bridge.**

15

**A Bird's Eye View** – Look down at the displays on the floor below.

From this bridge to the next room you can see the future of horses in the army. Do you see any horses?

Yes

☐

No

☐

## A Unit of Horsepower

Inventor James Watt determined that a horse could turn a mill wheel 144 times in an hour (or 2.4 times a minute); this became the measure of power for mechanical devices. In fact modern measurements have shown that horses produce slightly less horsepower when they are working.



Enter the next room.

## How Armies Used Horses – in 'The First World War'

Tick here when you find the example in this gallery

- ☐ As personal transportation for infantry officers
- ☐ For cavalry soldiers to ride in the battlefield
- ☐ To haul artillery from place to place and to move guns during battle
- ☐ To bring supplies to the army and to carry them on the march
- ☐ In military ceremonies and reviews

### 16 Work Horses – Stop at the big gun on wheels.

Armies still used horses in the First World War to move artillery and supplies. Imagine a team of six horses moving this 18-pounder field gun (at the front of the room) and estimate how far down the length of this room the horses would occupy.

- ☐ As far back as the Irish Republic flag
- ☐ As far back as 'The Irish Wars' panel
- ☐ All the way back to the end wall

**Hints:**

- The horses worked in pairs, that is the team was arranged as three sets of two horses side-by-side.
- Each horse extends about three metres in length.
- The first pair overlapped half of the pole attached to the field gun.
- Look at the photograph on the label 'Machinery of War' to see a train of wagons pulled by horses.

### 17 Infantry Horses – Stop at the panel on the right side behind the big gun.

'How to Read a Battalion' shows an infantry battalion from the British Army in the First World War. One officer is mounted on a horse.

What is the officer's rank? \_\_\_\_\_



The battalion would have had about 75 other horses, mostly to carry the baggage and supplies as the unit moved from place to place.

18

**Cavalry Against Machinery** – Walk around the last panel and stop at the next display along the wall.

Find a German machine gun and barbed wire at 'War on the Somme: What They Faced'. Read the labels.

Why were these two pieces of equipment so effective in stopping the British Army's cavalry on the Western Front?



Machine gun \_\_\_\_\_

Barbed wire \_\_\_\_\_



Leave this room and go down the stairs. When you explore the displays about the Irish Defence Forces, you will find vehicles instead of horses.

## How Armies Used Horses – in 'Claiming the Future'

19

**Tanks and Carriers** – One vehicle is at the bottom of the stairs. Turn right at the bottom of the stairs to find the others in the middle of the room (on different sides of the curved wall).

Find the four motor-driven vehicles on this floor.

Consult the label for the 'Weapons Specifications: Powerplant' to find the 'horsepower' (hp) of each engine – write the number on this chart.

| Vehicle                                      | Horsepower |
|----------------------------------------------|------------|
| UN Panhard M3 VTT Armoured Personnel Carrier |            |
| Landsverk L60 Light Tank                     |            |
| Ford Mark VI Armoured Car                    |            |
| Universal Carrier                            |            |

### Machine Power

In just a few years during the 20th century, the army used machine power to replace the ancient technology of using horses – which had lasted for thousands of years.

New technologies don't just replace old ones. In continuing certain functions, they open up new opportunities that were not possible before, and something new happens. For example, infantry soldiers no longer had to march: they could be transported in vehicles, in a protected shell.

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## Want to know more?

For more information on exhibitions and education programmes, contact the Education and Outreach Department of the National Museum of Ireland.

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Cover image: Sabretache, Fourth Dragoon Guards, c.1831, with kind permission of the Military History Society

