Hodder GCSE History for EDEXCEL

WARFARE THROUGH TIME
c.1250–present

Sarah Webb • Ed Podesta

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CONTENTS

3 Warfare and British society in the early modern period, c.1500–c.1700

Major changes took place in warfare between c.1500 and c.1700. Most importantly, this was the period when gunpowder weapons came to dominate the battlefield, a change that influenced many other aspects of war. Developments in science and technology enabled this shift by producing guns that were more useable and reliable. But was the factor of Science, technology and communications the only factor that brought about major changes? This chapter explores why significant changes took place in the early modern period.

3.1 What was warfare like in 1500?

The picture gives an impression of what battle was like at the beginning of the early modern period. It depicts the Battle of the Spurs fought in France in 1513, involving English troops. Look closely at the picture and answer the questions below.

WHAT WAS BATTLE LIKE IN 1500? **?**

Using the picture of the Battle of Spurs, answer these questions:

1. What weapons were being used?
2. How were the troops fighting? (What were their tactics?)
3. What type of armour and clothing was worn?
4. What proportion (approximately) of the soldiers were armed with gunpowder weapons (cannon or handguns)?
5. What similarities and what differences are there with what you remember about the nature of battles in the Middle Ages?

The picture shows that gunpowder weapons (cannon and handheld guns) were already being used at the beginning of the period, but only in small numbers. By 1700 they would dominate the battlefield. Developments in science and technology were crucial in enabling this change, so this chapter's Enquiry Question focuses on the role of science and technology in explaining changes in warfare.

'Developments in science and technology were the main reason for significant changes in warfare between c.1500 and c.1700'. How far do you agree? Explain your answer.

To answer this question we need to find out:

- what changed in warfare between c.1500 and c.1700
- what factors explain these changes.

To help you organise your notes as you work through this chapter, set up another Knowledge Organiser. Make a large (A3) copy of the table below and record your notes on this as you work through this chapter.

Knowledge Organiser

Topic	What were the main changes that took place c.1500–c.1700?	In what ways did science and technology contribute to these changes?	How did other factors contribute to these changes?
Weapons			
Composition of armies (number, type and tactics of combatants)			
Recruitment and training of combatants			
Experience of civilians			

◀ The artist Georg Lemberger's impression of the Battle of the Spurs fought in France in 1513. It was painted for the German Emperor Maximilian in 1515.

3.2 How much, and why, did weapons change, c.1500–c.1700?

Gunpowder weapons became the dominant weapon on the battlefield during this period. This was a major change. It was a shift that took place gradually but fully by 1700. The key changes that took place were as follows:

- Guns replaced traditional missile weapons like longbows and crossbows.
- By the 1640s two thirds of the infantry in English armies were armed with guns – this proportion was even higher by 1700.
- Cavalrymen were increasingly armed with pistols.
- Artillery (cannon) were used in larger numbers in battle.

How did science and technology contribute to changes in weapons?

Gunpowder was centuries old, and cannon and basic handguns had existed from the Middle Ages, but they had not been the main weapons in battle. Why did guns come to dominance in early modern warfare? The main reason was developments in science and technology that enabled guns to be produced that were more powerful and more reliable to use.
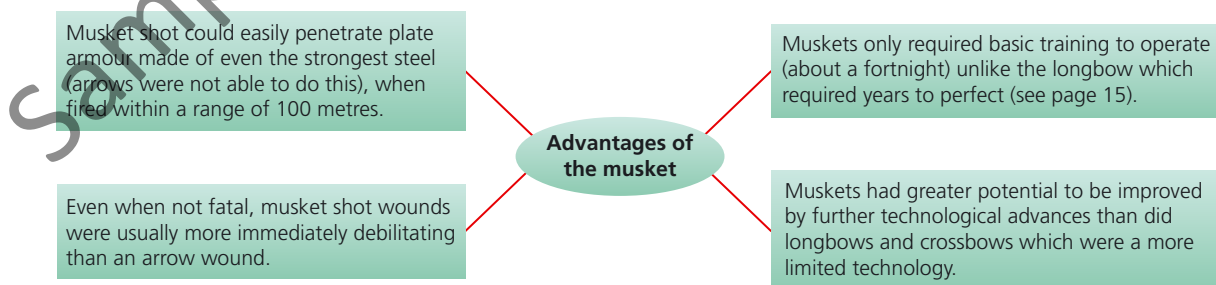
From the Middle Ages basic handguns (called hand cannon) used gunpowder to fire a round lead or stone ball (called shot). But these were very bulky, liable to explode in the user's face, incredibly inaccurate and probably required two men to fire. They were, understandably, not widely used.

Matchlock muskets

The more widespread use of firearms from the sixteenth century was because of the technological innovation of the matchlock mechanism used to fire the guns (see diagram on page 35). The **matchlock musket** had key advantages over early handguns, mainly that they could be fired by a single man and were less likely to explode in his face!

The musket, however, was not nearly as accurate as the longbow and had a much slower rate of fire. But it did have advantages over the longbow which explain why it rapidly replaced that weapon. The diagram below outlines these advantages.
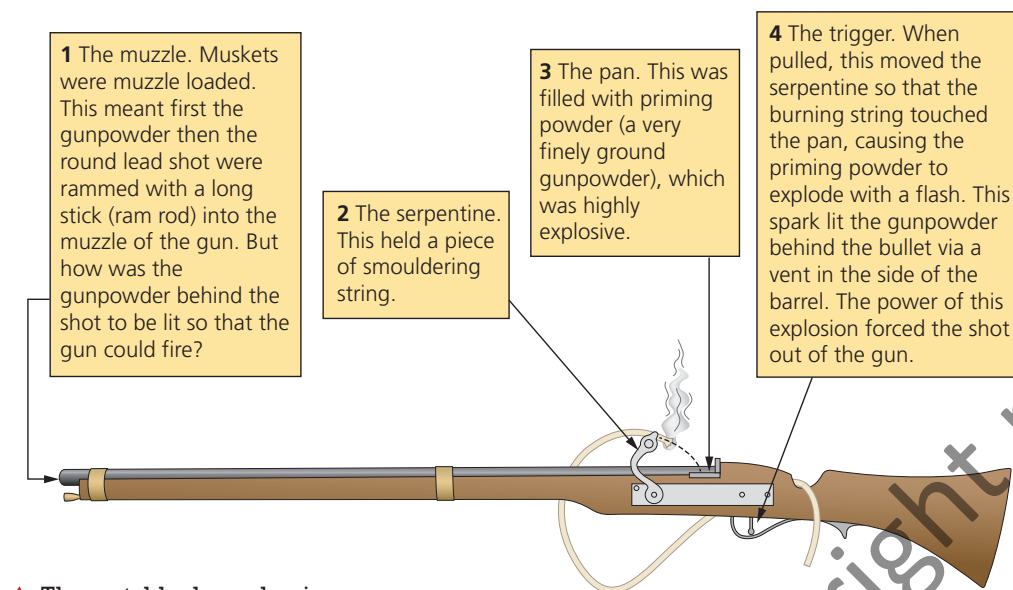
By the fifteenth century crossbows had a similar ability to muskets to pierce plate armour, also required only basic training and actually had a better rate of fire than muskets. But these crossbows (made of metal and wood) and their bolts were actually more expensive to produce than muskets, suggesting cost was another factor in why the musket came to overtake the crossbow in usage.

Musket shot could easily penetrate plate armour made of even the strongest steel (arrows were not able to do this), when fired within a range of 100 metres.

Muskets only required basic training to operate (about a fortnight) unlike the longbow which required years to perfect (see page 15).

Advantages of the musket

Even when not fatal, musket shot wounds were usually more immediately debilitating than an arrow wound.

Muskets had greater potential to be improved by further technological advances than did longbows and crossbows which were a more limited technology.

▲ Advantages of the musket

How (well) did early muskets work?

Let's have a closer look at how early matchlock muskets actually worked. The basic operation of the matchlock musket is shown in the diagram below.

1 The muzzle. Muskets were muzzle loaded. This meant first the gunpowder then the round lead shot were rammed with a long stick (ram rod) into the muzzle of the gun. But how was the gunpowder behind the shot to be lit so that the gun could fire?

2 The serpentine. This held a piece of smouldering string.

3 The pan. This was filled with priming powder (a very finely ground gunpowder), which was highly explosive.

4 The trigger. When pulled, this moved the serpentine so that the burning string touched the pan, causing the priming powder to explode with a flash. This spark lit the gunpowder behind the bullet via a vent in the side of the barrel. The power of this explosion forced the shot out of the gun.

▲ The matchlock mechanism

THE LIMITATIONS OF MATCHLOCK MUSKETS   **?**

Look at the diagram and list three possible problems that might occur when using matchlock muskets in battle.

Limitations of matchlock muskets

You probably thought of several problems with matchlock muskets.

- It was difficult to keep the smouldering cord alight in wet or damp weather.
- The explosion from the primer did not always successfully light the gunpowder in the barrel of the gun and so the gun failed to fire. It was not unusual for as many as four out of ten musket shots to fail to fire in the 1600s.
- The reload time was lengthy, especially since the barrel had to be regularly cleaned to remove gunpowder deposits. Typically only one shot every two to three minutes was possible.
- Their effective range was around 100 metres (much shorter than the longbow).
- They could not be fired very accurately at a target.

'A flash in the pan'
You may have heard this phrase to describe something that despite a showy or bright beginning actually amounts to very little (think of the careers of one-hit wonders!). The phase originates from describing when gunpowder in the primer exploded but failed to light the gunpowder in the barrel of the gun (which therefore didn't fire).

How did science and technology contribute to further changes to weapons?

Flintlock muskets

Flintlock muskets were introduced from the 1610s. The flintlock mechanism created the spark needed to ignite the gunpowder by a piece of flint striking against steel when the trigger was pulled. They were quicker, less dangerous and slightly more reliable than matchlocks. But they were more expensive. In the 1630s the only troops armed with them were the small number chosen to guard the gunpowder stores (to avoid the obvious danger of smouldering cords near a lot of gunpowder!).

Pistols

Pistols were much smaller and lighter than muskets, and had shorter barrels. They could be operated with only one hand which meant they could be, and were, used by cavalry.

It only became possible to operate a firearm with a single hand after the invention of the wheellock firing mechanism in around 1500 (matchlocks required two hands). This worked by the trigger releasing a small wheel that had been wound around a spring. When the wheel rotated it gave off sparks that ignited the priming powder in the pistol. But wheellock pistols were expensive, complicated and unreliable. They were replaced by the snaphaunce pistol from the 1560s, which was an early flintlock design, using a spring-loaded flint to strike sparks. Proper, more reliable, flintlock pistols were introduced from the 1610s. But the pistols remained relatively unreliable and had a short range and limited accuracy.

HOW MUCH, AND WHY, DID WEAPONS CHANGE, c.1500–1700? ?

1. Describe four of the main changes that took place in weapons during this period.
2. Add these changes to the first column of your Knowledge Organiser table (see page 33).
3. Explain the developments in science and technology that enabled these changes. Add them to the second column of your Knowledge Organiser table.
4. What other factors contributed to determining changes in weapons in this period (clue: think about cost – individuals and governments would have to pay for many of these weapons). Add these to the third column of your Knowledge Organiser table.
5. Describe the extent and pace of change that took place in weapons in this period in a paragraph. Remember to use vocabulary from the Word Wall you created on page 6 to help you talk more precisely, and to back up what you say with examples.

Cannon

Technological developments affecting cannon included:

- England's cast iron industry had grown from the sixteenth century (see page 14), which created new possibilities to manufacture cannons on a large scale.
- Innovations in cannon design made it possible to more easily alter the rate and range of fire, so making them more useful on the battlefield.
- Lighter weight cannon, called field guns, were developed that could be more easily transported by horses, again making them more useful in battles.

But cannon continued to have a limited range and poor accuracy.

Continuity in weapons: the pike and the sword

The limitations of matchlock muskets explains why muskets did not immediately replace traditional weapons. Pikes continued to be very important. The picture of the Battle of Spurs on pages 32–3 shows a large proportion of pikemen, and by the 1640s typically one third of English infantry were equipped with pikes.

Swords (and sometime lances) continued to be the most useful cavalry weapons, despite most cavalrymen also carrying pistols.

▲ A pikeman   ▲ A pike

3.3 How, and why, did the composition of the army change c.1500–c.1700?

The major changes that took place in weapons during this period had a significant impact on the composition of armies. Armies were made up of:

- **Infantry** (the biggest proportion of armies). Infantrymen were composed of a combination of musketeers and pike men. The proportion of musketeers increased steadily through the period, so that by 1700 almost all infantrymen were armed with muskets.

- **Dragoons** (a small proportion of the army). These were mounted infantry, armed with muskets. They usually rode into position but then fought on foot (it was unfeasible to fire a matchlock musket from horseback). They had smaller horses and more basic equipment than the cavalry (dragoons did not wear armour), and so were cheaper to recruit and maintain.

- **Cavalry** (typically made up about a third of the army). They were armed with swords and pistols. They no longer wore suits of armour (there was little point limiting mobility since the suits of armour provided little protection against shot), but instead wore simply plate armour breastplates.

- **Artillery** (very few in number).

There were some similarities to the composition of armies in the Middle Ages. These included the main division of armies into cavalry and infantry, with the infantry making up by far the largest proportion. But there were substantial differences: the type of infantry were different; pike men and musketeers replaced longbow men, and artillery was a new addition to the battlefield.

▲ A musketeer

THE COMPOSITION OF ARMIES, c.1500–1700

1. Describe the main changes that took place in the composition of armies in this period. Add them to the first column of your Knowledge Organiser table (see page 33).
2. Explain the scientific and technological developments that contributed to these changes. Add them to the second column of your Knowledge Organiser table.
3. Were there any other factors that contributed to determining changes in the composition of armies in this period? Add these to the third column of your Knowledge Organiser.

How did changes in weapons impact on tactics?

The changes in weaponry had an impact on the tactics used in battles.

WHAT WERE TYPICAL BATTLE TACTICS C.1500–C.1700?

For each of the four situations in the boxes below, select the option that you think is the best way to **deploy** (position and use) troops for battle. Give reasons for your choice. You may find it helpful to refer to some of the strengths and limitations of the weaponry (see pages 34–5).
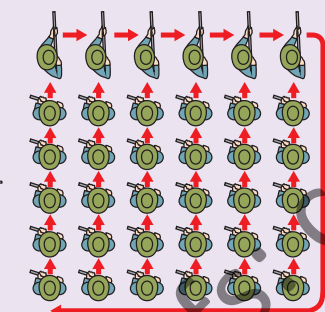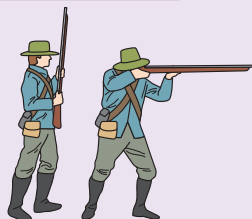
1 How would you deploy musketeers?

a) In a continuous long thin line (about two men deep) across the length of the battlefield.

b) In squares of six rows. The front row fires, then marches to the back to reload while the second row moves forward to fire, and so on.

The front row fires then moves to the back to reload
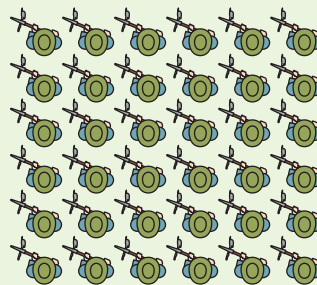
The second row moves forward to fire

▲ The Dutch Countermarch

2 How would you deploy pikemen?

a) In a continuous long thin line (about two men deep) across the length of the battlefield.

b) In squares of six rows.

3 How would you deploy cavalry?

a) At the centre of the battlefield in front of the infantry.

Key
◆ Cavalry
▬ Infantry

b) On the flanks (sides of the battlefield).

Key
◆ Cavalry
▬ Infantry

4 How would you deploy artillery?

a) In a group at the front of the battlefield.

Key
⬥ Artillery
▬ Infantry

b) In pairs between groups of infantry.

Key
⬥ Artillery
▬ Infantry

A big change in tactics?

If you chose to deploy your musketeers and pike men in squares, with your cavalry on the flanks, and artillery in pairs between groups of infantry, then you chose the tactics typically used in the early modern period. This was very different from the typical deployment of an army in the Middle Ages, with archers on the flanks and lines of knights (mounted or dismounted) in the centre.

Why did tactics change?

Tactics were driven by the capabilities (including the limitations) of the weapons used. These are explained in the diagram below.
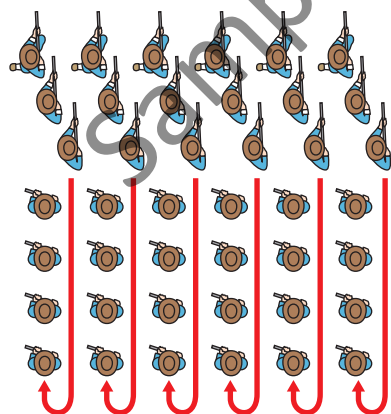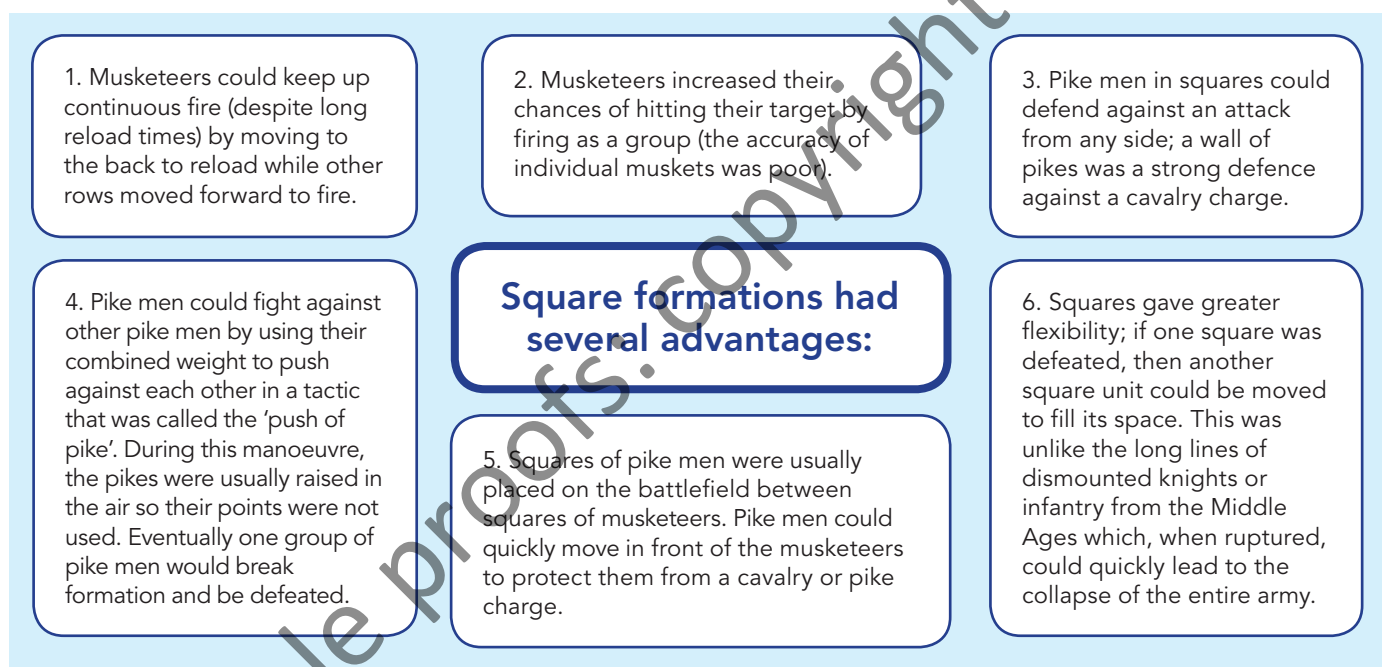
How did individuals influence changes in tactics?

Although changes in tactics were driven by the capabilities of new weaponry, it was individuals who came up with the tactical ideas. The use of musketeers in squares to achieve continuous fire was developed from the 1590s by Prince Maurice of Nassau from the Netherlands. This became known as the Dutch countermarch (see diagram on page 37).

A variation of these tactics was developed by King Gustav Adolf of Sweden from the 1620s. The Swedish armies deployed musket squares in rows six deep. The first row would kneel down, the second crouch above them and the third row stand. This meant that the front three rows could fire altogether to create a more forceful volley of fire. These rows would then withdraw to the back to reload while the remaining three rows moved forward to fire. This was known as the Swedish salvo.

The tactics developed by these individuals were widely known, as both the Dutch and Swedish armies produced training manuals designed to instruct soldiers in these tactics (since they required considerable drill training to be effective). These manuals were translated into several languages, including English.

Square formations had several advantages:

1. Musketeers could keep up continuous fire (despite long reload times) by moving to the back to reload while other rows moved forward to fire.

2. Musketeers increased their chances of hitting their target by firing as a group (the accuracy of individual muskets was poor).

3. Pike men in squares could defend against an attack from any side; a wall of pikes was a strong defence against a cavalry charge.

4. Pike men could fight against other pike men by using their combined weight to push against each other in a tactic that was called the 'push of pike'. During this manoeuvre, the pikes were usually raised in the air so their points were not used. Eventually one group of pike men would break formation and be defeated.

5. Squares of pike men were usually placed on the battlefield between squares of musketeers. Pike men could quickly move in front of the musketeers to protect them from a cavalry or pike charge.

6. Squares gave greater flexibility; if one square was defeated, then another square unit could be moved to fill its space. This was unlike the long lines of dismounted knights or infantry from the Middle Ages which, when ruptured, could quickly lead to the collapse of the entire army.
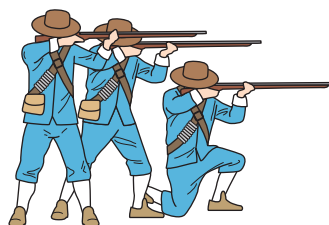
The first row kneels down

The second row crouches above them

The third row stands

These rows then withdraw to the back to reload

The remaining three rows move forward to fire

Add information about the factors that contributed to changes in the composition and tactics of armies in this period to the third column of your Knowledge Organiser.

◀ The Swedish salvo

The first three rows

3.4 How, and why, did the recruitment and training of combatants change, c.1500–c.1700?

The significant change in recruitment that took place in this period was a shift towards more permanent, professional and better-trained armies. But this shift did not take place until the 1640s. For the first part of this period, the recruitment and training of troops remained much the same as it had been in the Middle Ages.

Continuity in recruitment

The traditional methods of recruitment continued to be to send Commissioners of Array (royal officials) into the counties to assist in the muster of local civilian men for the armies (see page 22). The recruits were not professional soldiers and received their equipment and pay out of local taxes.

The local **militias** (sometimes called Trained Bands) were also an increasingly important part of defence. They were made up of small groups of local men (usually of moderate wealth) who purchased their own weapons and trained together for the purpose of providing local defence. But they were not a national army; in fact they frequently refused to fight outside their local areas.

Were the English Civil Wars a catalyst for change?

Enormous pressure was placed on the traditional recruiting system when civil war broke out in 1642. The Civil Wars were fought between the supporters of King Charles I (Royalists) and Parliament between 1642 and 1649. Both sides tried desperately to enlist men, and the need to find more efficient ways to recruit and train combatants undoubtedly accelerated the pace of change in recruitment and training.

At first both sides used traditional methods: the King sent Commissioners of Array and Parliament sent officials to appeal for the support of the local militias. But these measures tended to create lots of local armies that were often reluctant to fight outside their immediate localities. They also failed to provide sufficient numbers of recruits.

Both sides resorted to **conscription** (compelling men to fight) in the areas that they controlled. Parliament introduced conscription in 1643; the Royalists in 1644. Although this did lead to an increase in troops, they were poorly trained and desertion was a huge problem. It was not uncommon for one third of infantry units to desert.

Both sides produced propaganda pamphlets to encourage men to volunteer to serve in their armies. This was one of the first times this was possible, as it made use of the relatively recent development of the printing press to mass produce pamphlets. Many pamphlets told exaggerated stories of atrocities committed by the enemy.

But the significant change in recruitment came when Parliament reorganised its army in 1645, creating the **New Model Army**. It was new because it was a shift towards a more professional, national, and permanent or **standing army** (an army that exists even in peacetime).

▼ Modern re-enactors in the costume of infantrymen from the New Model Army

What was new about the New Model Army?

A more professional army

- Parliament passed the Self-Denying Ordinance in 1645 which removed incompetent military leaders who had gained their command solely due to their elite social status or because they were Members of Parliament. They were replaced by those with military experience like Thomas Fairfax who was made commander-in-chief of the New Model Army.
- Drill training (frequently repeating set manoeuvres) was given greater emphasis.
- Discipline of troops was enforced more strictly.
- Infantry troops were paid a reasonable wage – 8d (pence) a day – which encouraged better discipline. But even in the New Model Army wages were often in paid in arrears. More taxes were imposed in areas controlled by Parliament to help fund the wages and equipment of the New Model Army. But, at least 50 per cent of the infantry in the New Model Army were conscripts (not professional soldiers).

A national army

- The separate local parliamentary armies were merged together to create a national army of 22,000 men.
- It was funded by national rather than local taxes.
- All infantry were issued with a basic standard uniform for the first time: a russet (orangey-red) coat.

A standing army

- It was intended to be a more permanent army and it continued to exist even after the Civil Wars had ended.

A standing army after 1660

The New Model Army contributed significantly to Parliament's victory in the English Civil Wars. King Charles I was executed as a traitor to his own country in 1649, and Parliament (and later Oliver Cromwell) ruled without a monarch until 1660 when the monarchy was restored. Although the new king, Charles II (Charles I's son) disbanded the New Model Army in 1660, the existence of a permanent army (even in peacetime) continued as he established a new, small standing army. England has had a permanent standing army ever since.

King Charles II's original army was tiny – only a few regiments totalling a few thousand troops. Its small size was partly due to the fact that people were suspicious of an army that existed in peacetime, fearing that it may be used against the English people, and because of the increased taxes required to fund it.

Changes in government made possible the creation of a permanent standing army; in particular the increase in the government's financial revenues (mainly raised through increased taxation) which made it possible for the government to afford to pay the wages of permanent troops. The English Civil Wars accelerated the emergence of a standing army in England since military need prompted Parliament's creation of the New Model Army. But with standing armies emerging in other European countries at this time, it was likely England would have established a standing army around this time even without the Civil War.

How much did individuals contribute to changes in recruitment?

Oliver Cromwell, one of Parliament's leaders during the Civil Wars, was hugely important in the creation of the New Model Army and therefore in the shift towards a more permanent professional army.

OLIVER CROMWELL, 1599–1658

Oliver Cromwell, was a Member of Parliament (MP) and one of the Parliamentary leaders during the Civil Wars. He was also a skilled cavalryman, was vital to the creation of the New Model Army, and became the leader of its cavalry.

Cromwell insisted upon the importance of drill training and strict discipline among his troops. He believed commitment and skill should be more important in the promotion of commanders than their social status. He is said to have declared that 'I would rather have a plain russet-coated captain that knows what he fights for, and loves what he knows, than that which you call a gentlemen and nothing else.' He was a key figure in pushing to remove incompetent leaders from Parliament's armies, helping to draw up the Self-Denying Ordinance to this end in 1645 (see page 40).

In his religious beliefs he was a **Puritan** (a strict Protestant) and he believed fervently that the Civil Wars were a godly fight against Charles I, whom he condemned as a corrupt, unjust tyrant.

Did new weapons encourage changes in recruitment?

Developments in the science and technology of weapons, and the changes in tactics they encouraged, contributed to the shift towards more professional, permanent standing armies. We learned on pages 37–8 that muskets became widely used, but they had serious limitations in their rate, range and accuracy of fire had led to tactics that deployed soldiers in square formations flanked by pike men. However, square formations were only effective in battle if soldiers were well drilled and disciplined in manoeuvring in these formations. It's harder than you might think to march around in tight square formation, changing rows to reload and fire while keeping the structure. Discipline and constant drill practice was crucial, and this could be more easily achieved by professional, standing armies than in armies that were assembled of civilian-soldiers only in times of war.

Overall, significant changes in the recruitment and training of armies in the seventeenth century came about as a result of developments in the science and technology of weapons as well as the influence of government and individuals.

HOW MUCH, AND WHY, DID THE RECRUITMENT AND TRAINING OF COMBATANTS CHANGE, C.1500–C.1700?

1. Describe three things that made the New Model Army different from previous English armies.

2. Explain how Oliver Cromwell and King Charles II contributed to changes in the recruitment and training of combatants.

3. Describe the main changes that took place in recruitment and training of combatants in this period. Add them to the first column of your Knowledge Organiser table (see page 33).

4. Explain the technological developments that influenced these changes. Add them to the second column of your Knowledge Organiser table.

5. Were there any other factors that contributed to determining changes in recruitment and training in this period (think about government and individuals)? Add these to the third column of your Knowledge Organiser table.

3.5 Case study: the Battle of Naseby, 1645

The Battle of Naseby was a key battle in the English Civil Wars (1642–49). It took place in 1645 and was fought between the Royalist army of King Charles I and Parliament's newly formed New Model Army. Did the infantry's increased use of gunpowder weapons and pike men at this time mean that cavalry no longer played a decisive role on the battlefield? We are going to look at what happened at the Battle of Naseby and in particular to think about how important cavalry were determining its outcome. The engraving below shows the positions of the two armies just before the start of the battle.

▲ An engraving of the positions of the two armies at the start of the Battle of Naseby.
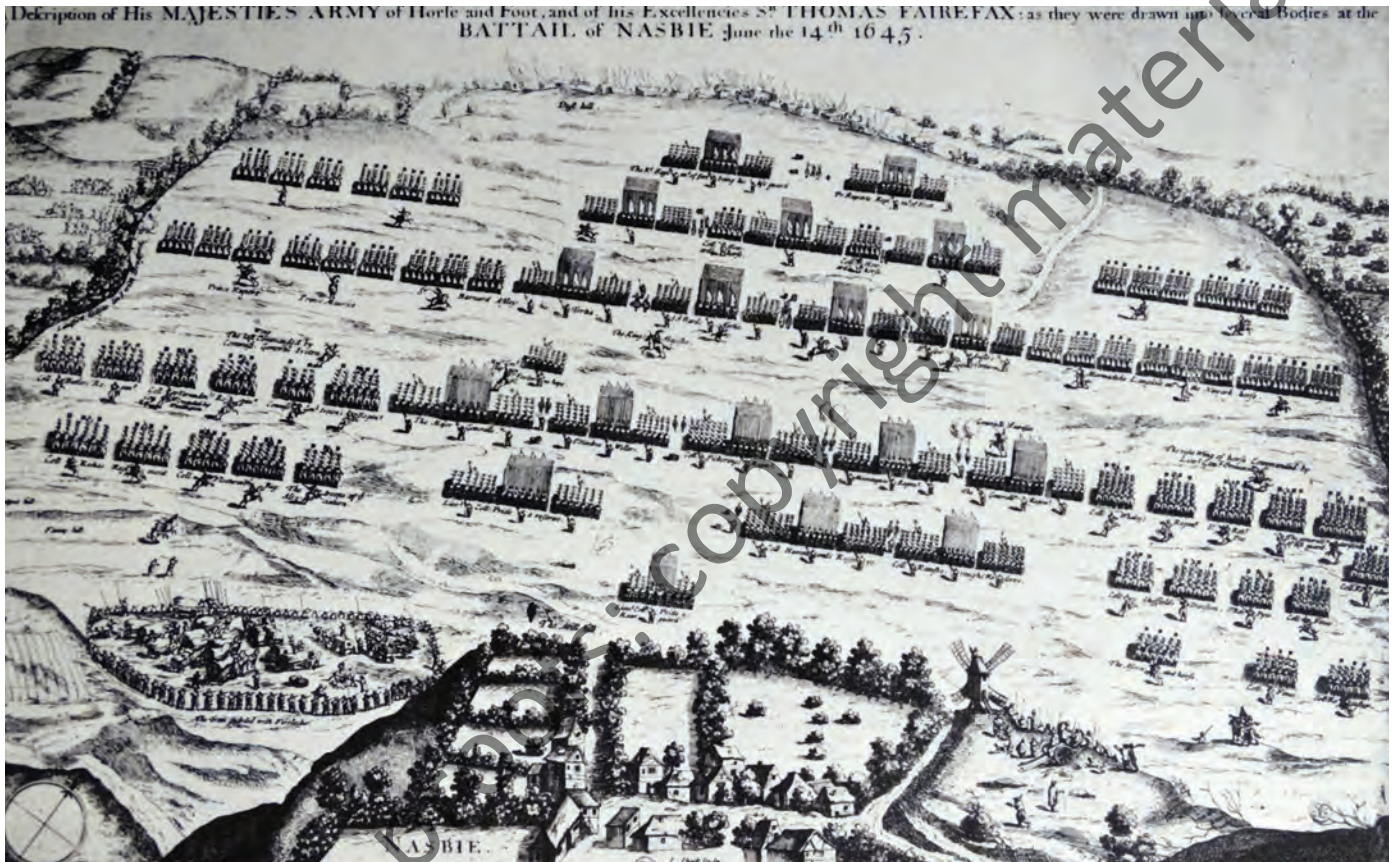
HOW IMPORTANT WERE THE CAVALRY AT NASEBY?

1. Look at the engraving above. Can you identify the:
   a) Royalists? b) Parliamentarians? c) pike men? d) musketeers?
   e) cavalry? f) dragoons (positioned on the left flank of the Parliament's army)?

?

1. On pages 43–4 you will read about the main stages of the Battle of Naseby. Decide at each of the six main stages whether:
   a) Parliament had the advantage
   b) Royalists had the advantage
   c) neither had the advantage.
   Give reasons for your answers.

2. Use your answers to Activity 2 to choose which of the following was most decisive in explaining the outcome of the battle:
   a) Role of the artillery
   b) Role of the infantry
   c) Role of the cavalry

Stage one: Numbers

The cavalry on both sides were experienced and skilled troops. The Parliamentarian cavalry were well trained and disciplined with experience of fighting together under their able military leader Oliver Cromwell (see page 41). The Royalist infantry had more battle experience.

Both sides struggled to raise and maintain infantry which explains why, unusually for the period, the numbers of cavalry were almost the same as infantry at Naseby (see graph).

▲ The number of troops in the Royalist and Parliamentarian armies at the Battle of Naseby (figures not exact but based on best estimates).

Stage two: Positions

The two armies were positioned opposite each other on opposing grass ridges with a shallow dip of land between them. The Parliamentary troops were positioned on a slightly higher ridge. They were protected on their flanks (sides) by thick hedges and rough, boggy ground. This location had been chosen by Oliver Cromwell. A low ridge just in front of the Royalist troops provided them with some protection.

Stage three: Artillery

The battle began when the Royalists advanced. The Parliamentarians fired about five of their artillery but most of the cannon balls overshot the advancing Royalist infantry. The armies were so close that there was no time to fire more artillery before the infantry engaged, making further use of artillery unwise as it would have endangered their own men. Most of the Royalist artillery had not been moved into position by the time the battle began, so was not used.

Stage four: Cavalry (1)

A swift and forceful Royalist cavalry charge, led by Prince Rupert (the nephew of King Charles I and leader of the Royalist cavalry at Naseby), stormed up the slope on the left-hand side of the battlefield. The Royalist cavalry, armed with pistols and swords, succeeded in chasing off the field at least 1000 (but not all) of the Parliamentary cavalry on the left-hand side of the battlefield.

Stage five: Infantry

The musketeers from both sides, probably in Swedish salvo formation (see page 38), fired a volley of shots as the infantry advanced. But the armies were so close that there was only time for one volley before the infantry met. Hand-to-hand combat followed with musketeers using the butts of their muskets as clubs and the pike men engaging in the 'push of pike' (see page 38). Although outnumbered, the more experienced Royalist infantry began pushing the Parliamentary infantry back.

The fighting was described by Sir Edward Walker, a Royalist who fought at the Battle of Naseby:

> The foot [infantry] on either side hardly saw each other till they were within shot, and so only made one volley; our falling in with sword and butt end of the musket did notable execution, insomuch as I saw their colours* fall and their foot in great disorder.
>
> * Colours mean flags that represent each army in a battle.

Stage six: Cavalry (2)

The Parliamentarian cavalry on the right of the battlefield, led by Oliver Cromwell, charged towards the Royalist cavalry. These were Parliament's best cavalry troops, known as the Ironsides – they were well equipped, well trained and well disciplined. Using swords and pistols they defeated and then chased the outnumbered Royalist cavalry on the right from the field.

Oliver Cromwell quickly regrouped his cavalry following the charge and led them against the flanks of the Royalist infantry. The Royalist infantry began to collapse. The Royalist cavalry led by Prince Rupert could not defend the infantry as they had not regrouped after their first charge but had ridden off to loot the Parliamentary **baggage train** at the rear of the battlefield. They did not return for at least an hour.

The Royalist historian Edward Hyde, the Earl of Clarendon, was frequently critical of Prince Rupert's leadership of the Royalist cavalry. He wrote:

> though the King's troops prevailed in the charge and routed [defeated] those they charged, they never rallied themselves again in order, nor could be brought to make a second charge again the same day … whereas Cromwell's troops … rallied again and stood in good order till they received new orders.

The Royalist cavalry reserve did not help the Royalist infantry either, possibly because they misinterpreted a signal on the battlefield believing it to be an instruction to leave the field.

The outcome of the Battle

The Royalist infantry quickly collapsed with no real assistance from the Royalist cavalry. Parliament's New Model Army was victorious at Naseby. Almost all the Royalist infantry were captured, as was a huge amount of Royalist gunpowder and firearms. Exact numbers of casualties are not known, but perhaps as many as 1000 Royalists were killed and about half that number of Parliament's troops. The battle had lasted about three hours.

POOR COMMUNICATIONS

Communicating effectively on the battlefield was difficult and continued to depend on gesture and voice commands. These were made even harder by the use of muskets and artillery which created noise and thick black smoke. It was frequently even difficult to tell friend from foe once battle had begun, especially as uniforms were not generally worn. Combatants often tried to wear some distinguishing object on their bodies for a battle, such as a leafy branch or piece of white cloth. They also used agreed secret words, which could be shouted if there was imminent danger of being killed by a member of their own side.

The role of Oliver Cromwell

Oliver Cromwell had an important role in determining the outcome of the battle. He was sure only to engage in battle once he knew that his troops outnumbered their Royalist opponents, and helped to select their starting position. His cavalry – the Ironsides – proved themselves to be skilled, determined and disciplined, charging against Royalist troops and then quickly rallying to charge again (something the Royalist cavalry failed to do). This was largely because of his training and leadership; many of these cavalrymen had been commanded by Cromwell since 1642.

Cromwell led by example: he was personally involved in the midst of the fighting. His passionate religious conviction in the 'right' of his cause against Charles I (see page 41) contributed to his determination and bravery as a commander.

Were the cavalry decisive?

Parliament's cavalry, particularly the Ironsides led by Oliver Cromwell, were probably the main reason for Parliament's victory at the Battle of Naseby. This revival of the cavalry's decisive importance in battle seems like a return to the earlier Middle Ages, and a change from the later Middle Ages when knights tended to fight dismounted. The cavalry's importance at Naseby was made possible because the technical limitations of muskets meant that they lacked accuracy, rate and range of fire. Had guns been more sophisticated, cavalry would have stood little chance, as we will see in Chapter 4. However, even at Naseby the cavalry alone could not have won the battle; they needed the infantry too.

REASONS FOR THE OUTCOME OF THE BATTLE   **?**

1. How did Oliver Cromwell contribute to Parliament's victory at the Battle of Naseby?
2. Rank the following in order of their importance in determining the outcome of the Battle of Naseby:
   – artillery
   – infantry (musketeers and pike men)
   – cavalry.
   Explain your rankings.
3. Explain how far the Battle of Naseby was typical of battles of this time. Refer to the following in your answer:
   – weapons
   – composition of armies (numbers, type and role/tactics of troops)
   – duration of battle.

3.6 How much, and why, did the experience of civilians change, c.1500–c.1700?

For much of the period c.1500–c.1700, civilians in England were not directly affected by warfare or coastal raids. However, civilians were hugely affected during the Civil Wars, 1642–49. Although the Civil Wars impacted people's lives on a much larger scale than previous wars, the type of burdens it imposed on people were similar to those in the Middle Ages.

The village of Myddle during the Civil Wars

We are going to read about how one village experienced the Civil Wars. Myddle was a small village of 350 residents near Shrewsbury, and the following account was written by Richard Gough who was a schoolboy during the Civil Wars. As an adult, he recorded the impact of the Civil War on where he grew up.

Out of the three towns of Myddle, Marton and Newton, there went [voluntarily to fight for the King] no less than 20 men, of which 13 were killed in the wars … And if so many died out of these three towns, we may reasonably guess that many thousands died in England in that war …

There was but few that went out of this village to serve the Parliament, and of them, there was none killed (as I know of) nor wounded except John Mould … he was shot through the leg with a musket bullet which broke the bone in his leg and slew his horse from under him. His leg was healed but was very crooked as long as he lived.

[Royalist soldiers] made excursions very often into Myddle, and took away cattle, provision and bedding, and whatever they pleased.

There happened no considerable act of hostility in this village during the time of the wars, saving only one small skirmish in Myddle, part of which I saw, while I was a schoolboy. [Our teacher] commanded us boys into the church, so that we could not see the whole action. [Royalist soldiers were in the village when there also by chance came several of Parliament's soldiers who were also garrisoned nearby. One of Parliament's soldiers shot a Royalist soldier] through the body with a **carbine** shot and he fell down. The other Royalist troops fled and two were taken prisoner. [The soldier who had been shot] was carried into Allen Chaloner's house … [our teacher] was sent to pray with him. I went with him and saw the man lying on his bed with much blood running along the floor. In the night a troop of [Royalist] horsemen came and took him to their garrison where he died the next day … The two soldiers captured were both hanged.

HOW DID THE CIVIL WAR AFFECT MYDDLE?

1. Describe at least three ways in which the civilians of Myddle were affected by the Civil Wars.
2. Look at the source on page 48. Can you identify the following items that have been pillaged by the looting Civil War soldier shown in the picture:
   – roast chicken   – string of sausages
   – duck   – cauldron (large cooking pot)?
3. How typical were the experiences of the civilians of Myddle during the Civil Wars? Read page 47 to help you to answer.

How much, and why, did the experience of civilians change, c.1500–c.1700?

The story of Myddle is useful in showing how a small village experienced the Civil Wars. But was the experience of Myddle typical?

Providing food and shelter for combatants

The most consistent burden on the villagers of Myddle during the Civil Wars was the **requisitioning** (forcible taking) of foodstuffs to feed the armies. This was typical. Armies at the time frequently 'lived off the land', meaning they did not carry sufficient food supplies with them, so civilians were expected to provide combatants with food. Civilians were also expected to provide **quarter** (accommodation) in their homes, known as **billeting** the troops. Soldiers, especially badly paid ones, were usually not good guests and often stole what they could. Billeting was one of the most unpopular burdens during the Civil War.

Civilians were supposed to receive payment as compensation, but this was rarely paid in advance. Instead 'free quarter' tickets were issued that could be redeemed for payment later, but payment was sometimes never made.

Looting

Looting was extremely common. Badly paid, poorly disciplined soldiers frequently took any opportunity to steal.

▲ This woodcut from the Civil War shows a common view of the pillaging soldier carrying the objects he has looted

Taxation

Increased taxation imposed by the government to fund the wars was a big burden on civilians. These taxes included excise taxes on the purchase of a wide range of foodstuffs (including salt and beer). Although these taxes were an exceptional response to the needs of war, more regular and higher taxes had become increasingly accepted by 1700.

Both sides also confiscated the property of their wealthy opponents, and forced wealthy individuals to pay compulsory loans.

Casualties

Many towns, particularly large ones where troops were **garrisoned**, experienced direct violence on a much greater scale than Myddle. About 150 towns suffered major attacks or were besieged during the Civil Wars. Deaths in sieges made up just over 10 per cent of the total Civil Wars deaths (many, but not all, of those who died in sieges would have been soldiers).

Conditions in sieges could get desperate. During the eleven-week siege of Colchester in the summer of 1648 the besieged Royalist troops and the local population ate horses, cats and dogs, and even candles and soap. In these conditions diseases, like plague, were common. If a besieged town refused to surrender but was eventually captured, then the victorious soldiers were permitted to loot and destroy much of the town in revenge. The rape and murder of civilians was not uncommon.

Estimates for the soldier and civilian casualties caused by the English Civil Wars, including those due to both combat and disease, was 180,000. This was about 3.6 per cent of the population, a proportion greater than the First World War (2.6 per cent) and the Second World War (0.6 per cent).

Propaganda

There were considerable attempts to inform, persuade and appeal to people about the events of war during this period. Both sides made use of the relatively newly invented printing press to mass produce pamphlets and weekly newsbooks. Many told exaggerated stories of atrocities.

▲ Parliamentary propaganda woodcut produced during the Civil Wars

Although there was considerable variation in the extent to which different areas suffered in the Civil Wars, overall the ways in which civilians experienced war in this period was not hugely different to the Middle Ages. What was different was the intensity of their experience during the Civil War.

THE EXPERIENCE OF CIVILIANS

1. Describe the main ways in which war impacted on civilians in this period.

2. Write a brief paragraph explaining the main continuities in the civilian experience of warfare in this period.

3. What were the main changes, if any, that took place in the civilian experience of war during this period? Add them to the first column of your Knowledge Organiser table (see page 33). If there were mainly continuities write a brief note to explain this.

4. Explain what factors influenced any changes in the civilian experience of warfare. Add them to the second and third columns of your Knowledge Organiser table.

Identifying the main reasons for change

Let's return to the key enquiry question for this chapter:

'Developments in science and technology were the main reason for significant changes in warfare between c.1500 and c.1700.' How far do you agree? Explain your answer.

This question asks you to make a judgement about whether science and technology were the **most important** factors in causing changes in warfare during the early modern period. This means you need to think about prioritising the factors; which were the most important, and which were the least important in causing change? The activity below will help you think about this.

PRIORITISING THE FACTORS

Use the Knowledge Organiser you completed throughout the chapter to help you answer these questions (see page 33).

1. Place the three factors in order from the most to the least important in explaining the changes which took place in each of the following topics:
   – weapons
   – composition of armies
   – recruitment and training of combatants
   – experience of civilians

2. Explain how important each of the factors was in creating changes in warfare. Use one or more of the following phrases to help you write a brief answer to this question.
   – … was the main / most important cause of …
   – … played a significant / important / major role in …
   – … was of some importance in…
   – … was of equal importance with …

   This brief answer is now your overall answer to the question.

Supporting your judgement

Whatever factor, or factors, you think are most important, you need to give a reason for your judgement. You can't just say that one factor was most important; it won't be convincing. To help you prove that one factor was particularly important you could:
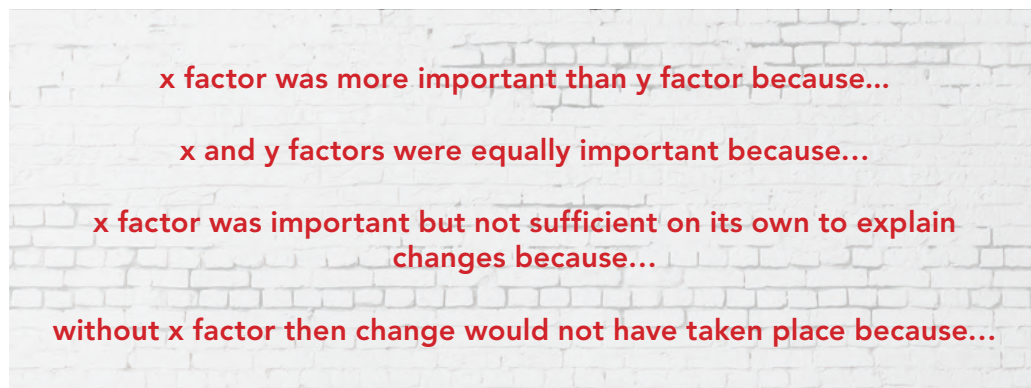
■ compare two factors and show how one factor is more important than the other in bringing about a change
■ show how the factor led to changes in lots of topic areas
■ demonstrate that without the factor changes would not have taken place
■ show how one factor links to lots of other factors (the most important factors usually have the most links to other factors).

Look at the two explanations opposite. For each, which factor does it think was most important in bringing about change, and how does it try to prove this.

> Science and technology was the most important factor in explaining changes in tactics, in particular the shift from linear to square battle formations. This was because square tactics were a response to the technical strengths and limitations of the new matchlock muskets. Square formations helped to counter the problem of the slow reload time of matchlock muskets by enabling continuous fire by having rows of men firing and then rotating to the back of the square to reload. Individuals were important in developing particular tactical formations, such as Prince Maurice of Nassau's Dutch countermarch. But the general shift away from linear tactics was determined more by developments in science and technology.

> Government and individuals were the most important factors in bringing about the change towards more professional, permanent armies during the early modern period. Without the increased revenues that governments raised through taxation from the seventeenth century, it would not have been possible to fund and pay the wages of a permanent professional army. Government and individuals were more important than attitudes in society in leading to this change, because at this time attitudes in society were largely hostile to the idea of a permanent, standing army, resenting its expense, fearing that it may be used by the ruler against the people, and tending to see England's best defence in its Royal Navy.
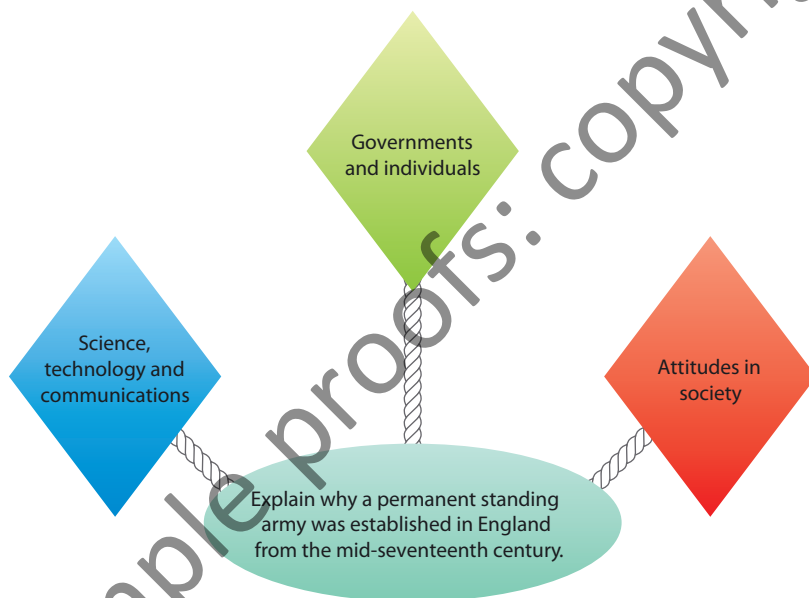
Revisiting the Word Wall

x factor was more important than y factor because...

x and y factors were equally important because…

x factor was important but not sufficient on its own to explain changes because…

without x factor then change would not have taken place because…

The phrases shown on the Word Wall are useful in helping you to explain the relative importance of factors. Add them to your own Word Wall. You should write them in the colour used for words that help you to answer questions more clearly and effectively.

Making links between factors

The factors often worked together to bring about changes in warfare. It is often helpful to talk about how the factors link together in an explanation. The activity below will help you to do this.

Governments and individuals

Science, technology and communications

Attitudes in society

Explain why a permanent standing army was established in England from the mid-seventeenth century.

Practice questions

Look at the question in the factor map.
1. Make your own copy of the diagram.
2. Draw arrows between the factors to show where you think a factor might have influenced another factor.
3. Annotate the lines to explain the links between the factors.
4. Do you think all the factors were of equal importance in explaining the change in the weapons used by infantrymen or do you think one factor was particularly important? Remember to explain your answer.

3.7 Communicating your answer

Before you begin writing your answer to the big enquiry question, it is important to plan how you are going to organise your answer. Let's remind ourselves of the question:

Developments in science and technology were the main reason for significant changes in warfare between c.1500 and c.1700. How far do you agree? Explain your answer.

It is another **how far** question, which means you need to reach a judgement about how far you agree that science and technology was the most important factor in causing changes to warfare. You will need to show that you can weigh the evidence **for** and **against** the statement. You might find that you 'mainly agree' with the statement or 'mainly disagree', or that you agree to 'a large extent' or 'to some extent'. The thinking you did on page 49 on deciding which factors were most significant will help you reach a judgement.

It is a good idea to discuss your ideas about which factors were the most important with a partner. Talking can really help you to clarify your own thinking, because it helps you to think carefully about how you explain your ideas when you try to communicate them to somebody else.

Visible learning: What is an argument?

An argument in history is not a punch up! Argument describes your view or judgement about what or why something happened in history – supported by evidence to show why you think this is. Some words can be particularly helpful in making your argument clear, such as the words you added to your Word Wall on page 51. Further powerful words that help you write more effectively can be found on page 174.

Organising your answer

Remember there are two main ways of organising your answer to a **how far** question.

- Approach one is to write a paragraph in **support** of the statement, followed by a paragraph to **counter** the statement, before finishing with your own judgement in the conclusion. This might include which factor you think was most important or how the factors worked together.
- Approach two is to structure your answer by all (or some) of the main topics: weapons, composition of armies, recruitment and training of combatants, experience of civilians. For each topic that you decide to include write a paragraph evaluating the extent to which changes were brought about by science and technology or by other factors.

The second approach enables you more frequently to talk about how the factors might work together (link together) to bring about changes in different topics. The examiner will be impressed if you can do this.

You will find more guidance in the Writing Guide on pages 174–175.

Now write your answer to the big enquiry question.

Practice questions

1. Explain **one** way in which the role of mounted soldiers was similar in the Battle of Falkirk (1298) to the Battle of Naseby (1645).
2. Explain why cavalry continued to have a significant role in battle throughout the early modern period?
3. 'The invention of the matchlock musket transformed the nature of warfare in the early modern period'. How far do you agree with this statement? Explain your answer.

Visible learning

How does talking help?

Some people think that students are only working effectively if the classroom is quiet. This is wrong. Experience shows that students write better answers if they have first talked through their answer with other people. Talking helps us organise ideas in our minds, choose the right words and decide what evidence we need to prove a point.

3.8 Visible learning: Revise and remember

1. Test yourself

Remember how important it is to test yourself to help make everything you have learned stick in your brain? Have a go at answering these questions, and don't be surprised if you spot a few questions from the previous chapter too (we need to keep refreshing our knowledge to help us remember!).

1 What weapon was first introduced to Europe in the 1320s?	**2** Explain two ways in which a foot soldier might be recruited in the Middle Ages?	**3** What was the name of the gun used by most infantrymen by the seventeenth century? Why was it given this name?	**4** What was the typical rate of fire of one of these guns?
5 What type of soldier made up about one third of infantrymen in English armies by the seventeenth century?	**6** What was the shape of a typical infantry formation by the seventeenth century? Explain two reasons for this.	**7** In what year was the New Model Army established? Explain two things that made it new.	**8** What was the name of the leader of Parliament's cavalry at the Battle of Naseby?
9 Explain one way in which Parliament's cavalry helped them to win the Battle of Naseby.	**10** Identify three ways in which civilians were affected by war in this period.	**11** What did you find hardest to understand in this chapter? How are you going to help yourself understand it?	**12** Name one thing that you learned in this chapter that surprised you or that you now think differently about. Explain why.

2. Set questions yourself

Work in a group of three. Each of you set revision questions on warfare in the early modern period. Then ask each other the questions – and make sure you know the answers!

3. Revise and remember: the Big Story

Remember that it is important as you work through this book to keep in mind the Big Story between c.1250 and the present. This is because you will be trying to identify patterns of change across periods as well as within them. Return to the big chart you began on page 31 to summarise the key developments for each time period.

1 Fill in the second column of your chart for the period 1500–1700. Remember you don't need to add lots of detail – you have your other Knowledge Organisers for this. Just add the key points.

	1250–1500	1500–1700	1700–1900	1900–present
Weapons				
Composition of armies (number, type and tactics of combatants)				
Recruitment and training of combatants				
Experience of civilians				