Richard III is one of the most controversial kings of England. In his brief reign (1483-85) he is believed to have been responsible for the murder of his two nephews, Prince Edward and Prince Richard (the famous ‘Princes in the Tower’) and was defeated at the Battle of Bosworth Field by Henry Tudor. This tall and hunch-backed man is still causing controversy; last year his remains were dug up under a car park in Leicester. This paper is about some of the questions which arise from his reputation.

There are three sections, all of which must be attempted. You should answer the questions in this booklet. You will also need the insert of supplementary sources for sections A and C.

You should spend about 25 minutes on each section. You will be told when to move on by the invigilator and you must do so. It does not matter if you do not finish every section; it matters more that you have had a go at each one. If you finish a section early you may move on to later sections. You may go back to other questions at the end.

Write all your answers, including any working out or rough work, in the booklet. If you want to highlight any details please do so.

You will need a pencil, a pen, a ruler and a rubber. You can write in either pencil or pen.
Section A

What happened to the Princes in the Tower?

Read the passage and study Sources A-F in the booklet. Then answer the questions which follow.

English history might have been so different if King Edward IV hadn’t overdone it one night in April 1483. The king ate so much that he was forced to go to bed to sleep it off. He caught a fever there and never left his bed alive again. Edward’s 12 year old son (also Edward) was sent to London to be made king and was soon joined by his 10 year old brother, Richard. But Edward was never crowned and neither was his little brother. Both boys disappeared and their uncle became Richard III. So what happened: and was foul play involved? In 1674 some workmen were working on a staircase in the Tower of London. Two metres underground they discovered a box full of bones. The bones were reburied in Westminster Abbey. In 1933 two doctors examined the bones. For hundreds of years people have argued about the evidence and interpreted it in different ways. Now is your chance to join in the debate.

Now read Sources A-F in the booklet.

Questions

1. Read Source A. On a scale of 1-5 (with 1 being the most compelling piece of evidence) decide on the order of importance of these findings in terms of their usefulness to the historian in trying to establish whether the princes were murdered by Richard III.

1
2
3
4
5

Explain why you have chosen 1 and 5.
2 Study Source B. According to this simplified family tree:

a What is the relationship between Cecily and the Earl of Warwick? [1]

b What is the relationship between John Beaufort and Henry VII? [1]

c Explain how both Henry VII and Richard III would have benefited from the disappearance of the Princes. [4]

3 Study Sources C and D. To what extent do these sources agree in their view? Look at both similarities and differences in your answer and reach a conclusion. [5]

4 Study Source F. Summarise why this author thinks Henry VII was to blame for the princes’ deaths. Use your own words and write a maximum of THREE sentences. [5]
How far do these Sources convince you that Richard III was responsible for the death of the Princes in the Tower? Explain your answer fully by looking at these Sources. Look at both sides of the argument and reach a conclusion.
Imagine you were one of the two Princes being kept locked up in the famous Tower of London. Surrounded by guards, and not knowing what was happening to you, the only person you could trust was your brother. How could you best communicate with him without the guards understanding you?

Often siblings develop special codes and secret words to talk to one another. We’re going to put ourselves in their places and look at developing a secret language. This language has to be one which you can speak, so you have to be able to say it out loud and apply your rules to it without having to write it down.

Questions

There are various examples already in existence of ‘secret languages’ which children use to communicate:

The first one is a language called Pig Latin:

Ig-pay atin-lay is-ay ite-quay aight-stray orward-fay

What does this sentence mean?
What do you have to do to change English into Pig Latin?

Backslang is probably a bit harder to work out in your head and to pronounce:

Od uoy kniht siht si reisae naht gip nital?

What does this sentence mean?

What do you have to do to change English into Backslang?

The last example of a children's secret language is Uvaguv. Here is an example: Cuvagan yuvagou spuvageak ivagun cuvagode?

What does this sentence mean?

What do you have to do to change English into Uvaguv?

Here are some things the boys might have tried to say to each other, using the secret languages. Have a go at decoding them:

Ose-thay uards-gay are-ay aking-may e-may ervous-nay
5 Od uoy kniht yeht nac dnatsrednu tahw ew era gniyas?

6 Thuvage suvagoup tuvagastes puvagoisuvagoned!

Now imagine you want to be able to communicate with them too. Work out how you would say the following things using the secret language indicated in brackets:

7 Watch out! King Richard is here! (Pig Latin)

8 Let's hide in the cupboard (Backslang)

9 I want to go outside! (Uvaguv)

Unfortunately, after days of listening to it, the guards work out the code and so the boys have to make it more difficult, by combining ideas from the different codes.

**New code: Suvagiht lluvagiw puvagots muvageht gnuvagiruvagaeh tuvagahw evaguw yuvagas**

10 What does the code say? What have they done?
What are some of the problems with combining the two codes?

11 Put this message into the new improved code
When will they learn?

12 Now invent your own code – explain what you are going to do and then give both the message and the decoded message. Don’t forget it has to be possible to speak this language out loud and work it out in your head. Then evaluate how good you think your code is and how well it would work.
Section C

The King in the car park

Richard was violently killed by Henry Tudor in the Battle of Bosworth in 1485. Records suggest that his body was buried in the Church of the Greyfriars Monastery which was situated in the centre of medieval Leicester. All traces of the monastery and the grave were destroyed more than 400 years ago. Last year archaeologists from the University of Leicester identified a potential location for the Greyfriars monastery on an area of land which is now used as a council car park.

The church at Greyfriars probably looked something like the picture in Fig. 1. The choir section would have been the one of the most sacred and high status areas of the church. Historical records suggest that the grave of Richard III was located in the south-western sector of the choir.

![Southern choir stall](image)

Fig. 1 The choir of Greyfriars

The archaeologists surveyed the car park using ‘ground penetrating radar’ (GPR) to try to find the church without having to dig it all up. The GPR device sends a radio signal into the ground which is reflected back up by objects below ground. It is very good at detecting the tops of buried masonry structures and the bottom of holes or spaces below ground surface.
Fig. 2 How GPR works

1. Radio wave sent from GPR device down through the ground
2. Radio wave reflected from object under ground to GPR device
3. GPR device measures vertical distance to object from modern ground level

Fig. 3 The choir of the church in cross section under the car park
Questions

Study Fig. 3.

You are going to use this diagram to simulate how GPR works. You will need to make accurate measurements using a ruler. You will work along the ground from south to north taking measurements at every 2 metre point shown on the tape measure.

Step 1: Measure how far down underground the church structures are from the current ground level at every 2 metre mark on the tape measure.

Step 2: Record your measurements in the table below. Don’t forget to label the columns clearly and include units of measurement.

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Unfortunately all the archaeologists found were signs of rubble and modern pipes. They decided to dig some trenches instead. They found a grave containing a skeleton in one of the trenches. A diagram of the skeleton is shown in Source I. They later realised that the trench had been dug through the choir of the church.

To investigate whether this skeleton could be Richard III experts at the university carried out further tests. A technique called radiocarbon dating was used to estimate the age of the skeleton. The graph in Fig. 5 can be used to convert radiocarbon levels into estimated dates.
2a On the graph carefully draw a vertical line from the time of Richard’s death on the horizontal axis until it meets the line of the curve. Use this to estimate the radiocarbon level the skeleton would need contain if it belongs to Richard III.

Level of radiocarbon =

b The actual radiocarbon level of the skeleton were found to be 450 units. What would be the estimated date of the skeleton? Show how you worked this out on the graph.

Estimated date of the skeleton is

The anomaly in the results is due to Richard’s diet which was likely to be high in sea food. When this is taken into account the estimated date of the skeleton is between 1475 and 1530. There is a 68% chance that this range is correct.
The archaeologists wanted to see if the skeleton was related to any known descendants of Richard III’s family using genetic testing. The human body is made up of little units, or cells, which contain genetic material made of a molecule called DNA. There are two types of DNA in living cells. The main type of DNA is found in a structure called the nucleus and it is unique to individuals. The archaeologists were interested in the other type of DNA which is found in structures called mitochondria. This is only passed on from mothers to their children through the female line. It doesn’t usually change much from generation to generation so lots of people can have very similar or even identical sections of this type of DNA even if they are not closely related to one another.

The archaeologists used family trees to find a present day living descendent of Richard III’s mother, Cecily Neville. The descendent is called Michael Ibsen. DNA testing was used to see if the DNA of the skeleton was similar to the DNA of Michael Ibsen.

3 Look at the family tree in Source G

a Name the individuals in the second generation who would have inherited Cecily’s DNA.

b Which individuals in the third generation would be potential ancestors of people alive today who could be tested for a DNA match with Cecily?
The DNA test results are shown in the chart in Source H. If the DNA sample is the same as another one there will be peaks of the same colour, size and shape in each position along the chart. This set of results was taken from a very short section of the total DNA. The particular type of DNA extracted from the skeleton has a frequency of 1% to 2% in present day European people.

4 Do you think that the skeleton is that of Richard III?

Use information presented anywhere in this question paper as well as Sources G, H and I to support your answer. You should consider evidence on both sides of the argument before reaching your final balanced conclusion.
Comprehension Paper - supplementary sources

You will need to read the Sources in this booklet to help you with questions in Section A and Section C.

Read the Sources carefully. You can highlight, underline or make notes in this booklet.
Section A

What happened to the Princes in the Tower?

Source A

The main findings of the report completed by two doctors of the bodies in 1933 were:

a. The skeletons were not complete
b. The bones belonged to two children aged about 10 and 12
c. Stain on one of the skulls may mean that they could have been suffocated
d. The bones could have been there since 1100
e. The elder boy had a serious tooth disease

Source B

Simplified family tree to show the descendants of Edward III
Source C
After June 1483 Prince Edward’s servants were kept from him. He and his brother Richard were taken to rooms further inside the Tower. They were seen behind the windows and window bars, but less and less often, until finally they were seen no more. I have seen men burst into tears at the mention of Prince Edward’s name, for already some people suspected he had been done away with. I have not discovered if he has been killed, nor how he might have died.

From a book by Dominic Mancini called How Richard III Made Himself King. Mancini was an Italian who visited England 1482-3. It is not clear how much English he understood.

Source D
For a long time the two sons of King Edward remained under guard in the Tower. Finally in September 1483, people in the south and west began to think of freeing them by force. The Duke of Buckingham, who deserted King Richard, was declared their leader. But then a rumour was spread that the Princes had died a violent death, but no one knew how.

From the anonymous author of Crowland Chronicle, writing in 1486.
I do not doubt for one moment that the Princes were alive when Henry VII came to London in August 1485. He issued a proclamation, giving all Richard's supposed crimes and this list did not include the killing of the Princes. That to my mind is definite proof that the Princes were not even missing. They must still have been in the Tower. Richard had no reason to kill them: Henry had every reason. If they lived, all he had fought for would be useless because Prince Edward had more right to be king than Henry Tudor. Henry was capable of such a crime, so the boys were quietly but efficiently murdered. Elizabeth Woodville, the boy's mother, was locked into a nunnery. Henry spread the word that Richard had done the killing. Henry Tudor, murderer and liar – it's time the truth was known!

In 1972 Philip Lindsay, a historian, wrote this article in a magazine. This is an extract.

Source G
Diagram of the skeleton found in the choir during excavation of Greyfriars Church