

# IPPLEPEN THROUGH TIME



Understanding Landscapes  
Teacher Resource Pack

# Acknowledgements



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For further information please visit:

<https://archaeology.exeter.ac.uk/research/projects/understandinglandscapes/>

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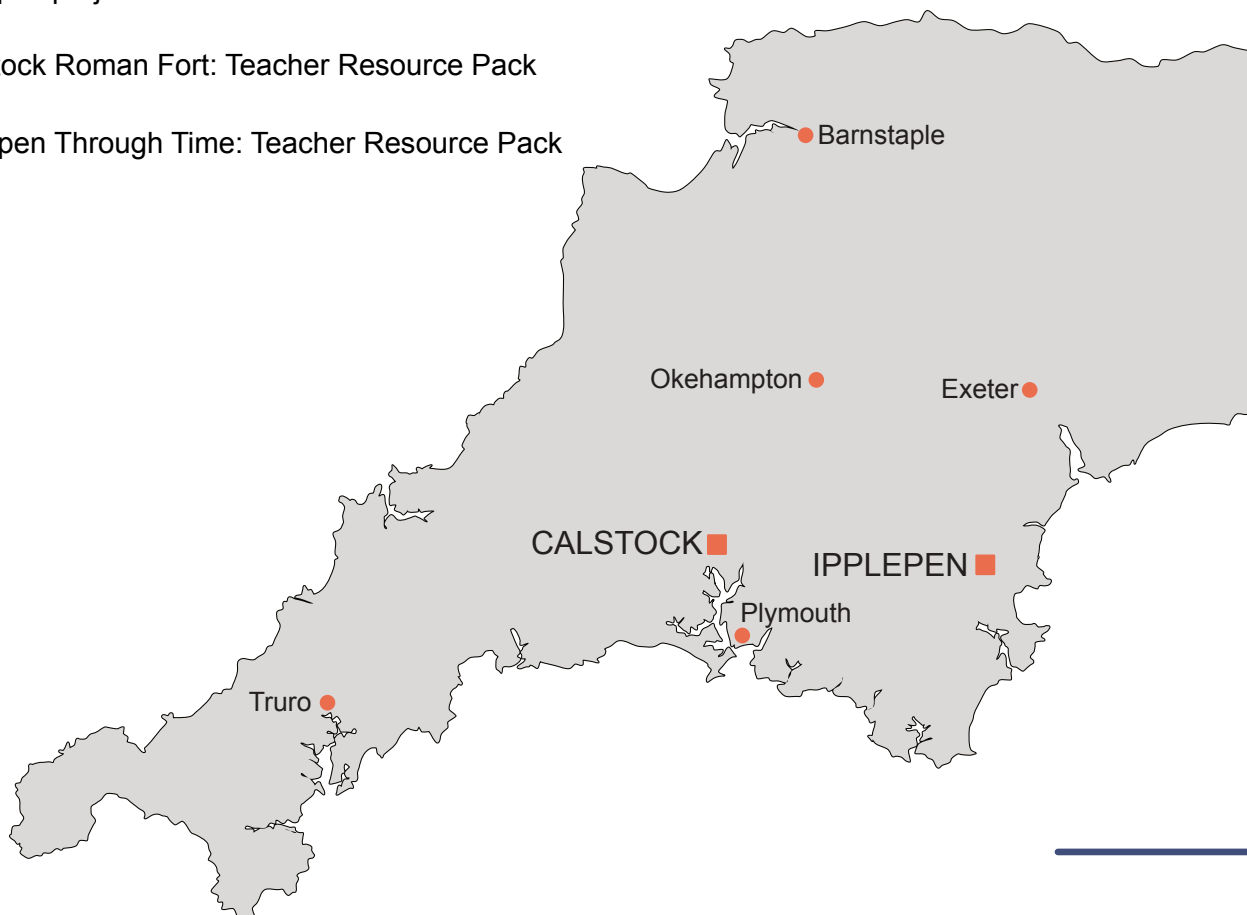
# Introduction

Archaeological investigations at Dainton Elms Cross, a site on the eastern side of the village of Ipplepen in South Devon, have provided a unique insight into the history of the people who once lived there. A combination of geophysical surveys, metal detecting, and archaeological excavations conducted between 2007 and 2019 has been used to uncover the history of the multi-period site. The investigations have revealed the change and development of the site, from its initial occupation during the Neolithic period and then through the Iron Age, the Roman period, and into Early Medieval times.

This resource pack, developed for use by Key Stage 2 teachers, explores the archaeological processes used to uncover the history of the site and provides insights into the lives of the people who lived there. The pack aligns with the History curriculum and makes connections to other curriculum areas, including Science, English, and Art and Design.

Two Understand Landscapes Teacher Resource Packs have been produced, using the same archaeological lesson themes, as part of the Understanding Landscapes project:

- Calstock Roman Fort: Teacher Resource Pack
- Ipplepen Through Time: Teacher Resource Pack



## How to use this resource

Six lessons have been developed to engage pupils in the study of archaeology and the history of Ipplepen. Each lesson comes with an associated Resource Pack that includes all the materials needed for its delivery. While the content is aimed at Key Stage 2 (KS2) pupils, it can be adapted to suit both younger and older children. The lessons are designed to be taught in sequence, but many can also be taught as standalone sessions.

The teacher Resource Pack is designed to be used alongside the booklet *Prehistoric, Roman, and Medieval Ipplepen: Archaeological Investigations 2007–2019*, which is available as a downloadable PDF, and provides a summary of the archaeological investigations that took place at Ipplepen between 2007 and 2019. <https://archaeology.exeter.ac.uk/research/projects/understandinglandscapes/>.

Teachers' notes have been provided to give a brief overview of the history of the site and support the teaching of the lessons.

Aerial view of the 2018 excavations, looking north-west over the site, the modern village of Ipplepen, and Denbury towards Dartmoor. Credit: Richard Agnew



# Teacher notes: an overview of Ipplepen

## Introduction

This resource pack explores the archaeological discoveries made at the Ipplepen site, which was investigated between 2007 and 2019. Ipplepen is a village in South Devon, situated between the coast of Torbay and Dartmoor National Park. While the site is referred to as Ipplepen, it is more precisely located at Dainton Elms Cross, about a kilometre east of the village centre.

The site is located on a relatively flat, elevated position that provides good views of the surrounding area. The underlying geology is mainly Devonian slate, with some layers of limestone, sandstone, and mudstone, creating free-draining soils at ground level. Although the site is not adjacent to a river, springs and a near-surface water table would have provided a water supply for the communities that lived here.

The potential for significant archaeological remains at Ipplepen was first suggested by aerial photographs taken in 1996, showing cropmarks indicating buried archaeology. These cropmarks complemented earlier reports of Roman objects found through metal detecting. In 2007, an archaeological excavation associated with a construction project confirmed Roman features at the site. Systematic searches by local metal detectorists Jim Wills and Dennis Hewings between 2008 and 2013 recovered 115 Roman coins from five fields, suggesting the remains of a Roman settlement beneath the surface.

Geophysical surveys conducted between 2010 and 2019 helped map the site's buried archaeology. These surveys revealed a complex of ditched enclosures, trackways, and roundhouses located beneath the area where the detectorists had found the Roman coins. The surveys enabled archaeologists to quickly map the site's extent and identify locations for further excavation.

Ten phases of archaeological excavation have been conducted at Dainton Elms Cross, beginning in 2007. These excavations, often involving the local community and students from the University of Exeter, have uncovered a complex, multi-layered site with evidence of long-term occupation. Despite extensive excavation, only a small percentage of the site has been explored. The information we know so far is based on this small sample, and future investigations may add to the story of the site that we currently understand.

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## Early-Middle Neolithic (c. 4300 BC to 2000 BC)

Archaeological evidence has shown that people were living at the site in Ipplepen during Early-Middle Neolithic period, roughly from around 4300 BC to 2000 BC. At this time, people in Britain began farming. The evidence for occupation during this time includes groups of pits where domestic waste such as pottery, flint flakes, arrowheads, and quern stones used for grinding corn were found. Additionally, environmental evidence shows these people gathered wild plants such as hazelnuts for food.

## Iron Age (c.400 BC-AD 43)

The site was occupied during the Iron Age, around 400 BC to AD 43. At this time, people lived in small farming settlements characterised by roundhouses with walls made of timber and mud, likely thatched with straw or reeds. Archaeologists have found bones and teeth showing they raised cattle, sheep, and pigs. The cattle would have been kept for their meat, and also to pull ploughs, and their skins would have been turned into leather; the sheep would have provided wool for clothing as well as meat and the pigs were kept for their meat. Crops like wheat, barley, and oats were cultivated, with wheat being ground into flour for bread and barley brewed into beer. Domestic dogs were also part of their community. After death, people would have been cremated.

## Roman period AD 43-AD 410

In the mid AD 50s, the south-west of Britain was conquered by the Romans. During this time, a major fortress was constructed at Exeter. A significant road was built from Exeter which crossed the river Teign at Newton Abbot and passed through the excavated settlement at Ipplepen.

Along this road, at Ipplepen, a village developed which contained farms and people making a living by providing services to this community and people living further field. Archaeological excavations of this settlement give us an insight into the life of the people who lived there during the Roman period. Wells were dug for water as the settlement is somewhat from the nearest river. Various livestock were kept, including cattle, sheep, pigs and chickens and they also had dogs and horses. People grew crops like wheat, barley, oats, and beans (similar to modern broad beans). There was



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also a blacksmith's forge and a slaughterhouse. Environmental evidence, in the form of bones, shows that wild animals living around the settlement included badgers, red deer, and squirrels.

During the Roman period, people here continued to live in traditional roundhouses, but one structure was more 'Roman' in its style (being rectangular). Roman influence did, however, introduce new practices such as regular use of coins to buy and sell things. People started eating and drinking in a Roman fashion, including wine that came from the Mediterranean in tall ceramic vessels known as amphorae and drunk from fine-quality glass drinking vessels. They also started to dress in a Roman way (e.g. wearing clothes pinned together using brooches) and their dead were buried in a cemetery nearby.

### Post Roman Empire period in Britain AD 410–c. AD 800

Following the Roman departure in the early 5th century AD, life persisted at Ipplepen until around the 8th century AD. Evidence suggests a shift towards self-sufficiency due to economic changes. Coin use was abandoned and there was a decrease in the production of pottery. Burials continued in a cemetery near the old Roman road.

### Abandonment in the 8th century AD

Ultimately, the settlement and cemetery were abandoned in the 8th century AD, though the fertile agricultural land in the Ipplepen area likely remained inhabited, possibly seeing a shift towards a nearby established Christian church where the modern village stands today.

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## Lesson overview and curriculum links

Below is a summary of the sequence of six lessons designed to explore the history of the site at Ipplepen and guide pupils through the processes archaeologists use to investigate the past. Detailed lesson plans with associated resources can be found on pages 13 to 24

All lessons are closely aligned with the Key Stage 2 History curriculum. Additionally, due to the multidisciplinary nature of archaeological investigation, connections can be made to other curriculum areas including Science, Geography, Art and Design, and English. Specific links to national curriculum areas are detailed in the lesson plans.

### 1. A place through time

This lesson introduces the role of archaeologists and their methods of investigating the past. Pupils examine the Ipplepen site, create a timeline showing its evolution over time, and contextualise it within national and international events.

### 2. Clues from the landscape

Through this lesson, pupils explore various sources archaeologists use, such as maps, aerial images, and geophysical survey results, to understand past landscapes. Students can use these resources to create an archaeological site map.

### 3. Evidence from under the ground

This lesson focuses on Roman archaeological finds discovered at Ipplepen during excavations. Students learn about the evidence preserved on archaeological sites and explore what some of the finds can tell us about the people who lived there during the Roman period.

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#### 4. Impressions of the past

During this lesson, students look at the different features archaeologists uncover in the ground, such as ditches, postholes, and pits. Pupils will create an archaeological plan and think about what the marks in the ground can tell us about the buildings and other features that were once there.

#### 5. Under the microscope

In this lesson, pupils will look more closely at soil and explore the evidence that archaeologists can find in it to tell us about past environments. Children will look at and illustrate how the site at Ipplepen has changed over time.

#### 6. Reconstructing the past

Archaeologists bring all the different pieces of evidence together to give an interpretation of the past. Students will draw together all they have learnt about Ipplepen from the archaeological investigations and create their own interpretation board to share with other people.

# Lesson plans



Credit: Jim Wileman

## Ippelen through time

# Lesson 1: A place through time

## Introduction

This lesson introduces the subject of archaeology, the role of an archaeologist and the Ipplepen site. Pupils create a timeline showing its evolution over time, and contextualise it within national and international events.

### Lesson objective

To introduce the role of archaeologists in investigating the past and develop a chronological understanding of the history of the site at Ipplepen.

### National Curriculum links

History: develop a chronologically secure knowledge and understanding of British, local and world history.

### Resources

Use Resource Pack 1

## Teaching sequence

### Introduction

Show Resource 1.1. Ask pupils to look closely at the photograph and use the frame 'I see, I think, I wonder' to explore the picture. Ask the children to share their thoughts. Explain that the image shows archaeologists excavating at Ipplepen.

Clarify children's understanding of what archaeology is using Resource 1.2. Depending on the children's prior knowledge, you may wish to use Resource 1.3 to discuss the role of an archaeologist further. (Key words to use throughout are available in Resource 1.4.)

### Class learning

Use the aerial image of Ipplepen (Resource 1.5) to show the location of the site (circled in blue) and its location relative to the coast. Explore its location using Google Maps (search using postcode TQ12 5TY to find the approximate location of the site).

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Explain to the class that archaeologists have been investigating the site for many years and have begun to piece together its history. The area is now mainly farmland, but archaeologists have found evidence that people first lived there over 6,000 years ago, and by the Roman period (approximately 2,000 years ago), there was a road running through it and buildings surrounding it.

To understand the history and the depth of time at the site, ask the children to create a timeline for Ipplepen. Explain to the class that timelines are an essential tool for archaeologists. They use them to order events and explore the causes and consequences of different occurrences.

Use the timeline cards (Resource 1.6) to share information and create a class timeline. The timeline could be constructed in various ways, such as using chalk on the playground for an outdoor timeline, laying out a ball of string with pegged cards to visually represent time intervals between events, or forming a human timeline by spreading individuals across the playground, each holding an event card.

### Independent learning

Children create their own timeline using Resource 1.7. Place events specific to Ipplepen above the centre line. Below the line, add events from other parts of the country/world, such as the Roman invasion of Britain in AD 43, the Battle of Hastings in AD 1066, and the Great Fire of London 1666. Provide books, other timelines, or online research to find additional important events. Alternatively, use this as an assessment opportunity to gauge pupils' knowledge of historic events.

### Sharing

Pupils discuss their timelines with each other. Ask: What have they included? What have they left out? Why?

Discuss: Why are timelines important for archaeologists? Why do we examine events in chronological order?

# Lesson 2: Clues from the landscape

## Introduction

Through this lesson, pupils explore various sources archaeologists use, such as maps, aerial images, and geophysical survey results, to understand past landscapes. Students then use these sources to create an archaeological site map.

## Lesson objective

To explore the different sources that archaeologists use to investigate the landscape and to communicate geographical information through a map.

## National Curriculum links

History: understand how our knowledge of the past is constructed from a range of sources.

Geography: interpret a range of sources of geographical information.  
Communicate geographical information through maps.

## Resources

Resource Pack 2 and Google Maps

## Teaching sequence

### Introduction

Explain to pupils that the landscape in Britain has been shaped by past human activity. Clues about people who lived in the past can be found in physical remains that can still be seen in the landscape.

Archaeologists use a range of sources to investigate this 'historic' landscape.

Q: What sources could archaeologists use to investigate the landscape?  
(Briefly show Resources in Pack 2, such as historic maps, aerial photographs, geophysical surveys, etc.)

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## Class learning

Q: Why did the archaeology at Ipplepen remain undiscovered until 2007?

Use Resource 2.1 to show the location of the archaeological site. Explain to the class that the site is known as Ipplepen but its precise location is Dainton Elms Cross, Ipplepen. (Search using postcode TQ12 5TY to find the approximate location online).

Use Resource 2.2 and explain to the class that you will focus on one field (outlined in blue) to investigate any clues about buried archaeology. Ask the pupils to examine old maps (Resources 2.3 and 2.4), an aerial image (Resource 2.6), and a geophysical survey (Resource 2.9). Share the information from Resources 2.5 and 2.9 to help the pupils understand cropmarks and geophysical surveys.

Historic maps provide no clues about buried archaeology at this location, but the aerial photograph with cropmarks and the geophysical surveys reveal interesting features below the surface!

## Independent learning

Show Resource 2.10. Explain that when archaeologists discover new sites, they create maps to share the information with others. Use Resource 2.10 or 2.11 and ask the pupils to create their own map showing the exact location of the archaeological features they have identified. Begin by marking the general location on the South West map, and then provide more specific details in the lower section.

Q: What information do they need to include? Can they sketch the archaeological features found in the field?

## Sharing

Have the pupils compare their location maps with partners. Explain to each other what they have included in their maps. Discuss if there is any additional information that should be shown.

## Extension suggestions

Explore the full range of historic maps Ipplepen on the National Library of Scotland's website <https://www.nls.uk> .



# Lesson 3: Evidence from under the ground

## Introduction

This lesson focuses on archaeological finds dated to the Roman period discovered at Ipplepen during excavations. Students learn about the evidence preserved on archaeological sites and explore what some of the finds can tell us about the people who lived there during the Roman period.

## Lesson objective

To learn how objects can be used as a source of information to tell us about the past.

## National Curriculum links

History: understand how our knowledge of the past is constructed from a range of sources. Devise historically valid questions.

Science: compare and group together everyday materials on the basis of their properties.

## Resources

Resource Pack 3

## Teaching sequence

### Introduction

Show Resource 3.1. Ask: What types of material do you think the children found in the ground?

Use Resource 3.2 or gather a selection of different materials. Separate the materials into two groups: those that would survive and those that would decay in the ground.

### Class learning

Share the image of a Roman soldier from Resource 3.3. Discuss what they are wearing (refer to notes in Resource 3.4 to support this).

Q: What parts of the soldier's military dress do you think would survive and

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what would decay if buried in the ground? Repeat this activity with the image of a Roman woman in Resource 3.5.

Discuss why archaeologists usually find broken items and rarely find complete objects. Explain that people often repaired their belongings and typically only discarded that were no longer useful.

### Small group activity

Challenge the children to investigate artefacts the way archaeologists would. Divide the class into small groups and provide each group with a selection of artefact image cards (Resource 3.7). Explain that these artefacts were found at Ipplepen and all date to the Roman period. Place each artefact card in the centre of Resource 3.6 and discuss the questions listed. These are the types of questions archaeologists ask. Can the children answer any of these questions?

Give out the information card about each artefact (Resource 3.8).

Q: Did they answer any questions correctly? Does the information answer all the questions? What else would they like to know about the artefact?

### Discussion

Q: What do the artefacts dated to the Roman period in Britain tell us about the people who lived at Ipplepen?

Discuss each artefact in turn. For example:

- The Roman-style brooches and beads indicate that Romano-British people dressed in a Roman style.
- The amphora and glass suggest they drank wine.
- The pottery made in other locations shows they were connected to other places.
- The crucible indicates that there were craftspeople in their community.

Q: Does everyone agree with the interpretation of the artefacts? Could there be a different interpretation?

### Extension suggestions

Use the artefact images to create a classroom museum display. Research the artefacts and draw reconstruction images to show what they would have looked like in the Roman period. Label the images and include information about what it is, how it was made and its use.

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# Lesson 4: Impressions of the past

## Introduction

During this lesson, students look at the different features archaeologists uncover in the ground, such as ditches, postholes, and pits. Pupils will create an archaeological plan and think about what the marks in the ground can tell us about the buildings and other features that were once there.

## Lesson objective

To understand how archaeologists use evidence from the ground to tell us about the structure of a Roman fort.

## National Curriculum links

History: understand how our knowledge of the past is constructed from a range of sources.

Maths: co-ordinates.

## Resources

Resource Pack 4

## Teaching sequence

### Introduction

The artefacts found in the ground at Ipplepen prove that people lived there during the Neolithic, Iron Age, Roman, and Early Medieval periods. But how do we know what their houses looked like and how they lived?

Show Resource 4.2. These are all archaeological 'features' that have been found in the ground and tell us more about the people who lived there.

### Class learning

Understanding how archaeologists interpret these features can be complex, but can be explained through the archaeological processes playdough activity described in Resource 4.1. This can be a teacher-led activity or, if resources allow, children can work in small groups.

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## Independent learning

Show Resource 4.3. Explain that archaeologists record every feature they excavate to interpret and understand what each was. Challenge children to create their own archaeological plan of the trench shown in Resource 4.6. A grid has been placed over the trench image to ensure accuracy, similar to how archaeologists use grids on site (link to their knowledge of co-ordinates in maths to support their use of the grid. They could number the lines of the grid).

Use Resource 4.6 which has the outline of the trench drawn on it or Resource 4.7 which is a blank grid.

## Sharing

Compare archaeological plans with a partner. Are the drawings the same? If not, what is different and why?

Can they try and interpret what all the holes mean? (Note: this very hard to do unless you are working on the site!).

Reveal the archaeologist's interpretation of some of the features using Resource 4.8.

## Extension suggestions

Extend the planning activity by drawing real items. Chalk out a one-metre grid square (with lines every 10 cm) in the playground or use masking tape in the classroom. Arrange a selection of objects within the grid and challenge the children to create an accurate plan of where the items are at a 1:10 scale.

Provide the children with 1 cm squared paper and explain that to make a scaled drawing; every 10 cm they measure should be represented as 1 cm on the paper.

# Lesson 5: Under the microscope

## Introduction

In this lesson, pupils will look more closely at soil and explore the evidence that archaeologists can find in it to tell us about past environments.

Children will look at and illustrate how the site at Ipplepen has changed over time.

## Lesson objective

To learn that landscapes change over time and the evidence for this change can be found in the soil.

## National Curriculum links

History: address historically valid questions about change, cause, similarity and difference, and significance. Understand how our knowledge of the past is constructed from a range of sources.

Science: recognise that soils are made from rocks and organic matter.

## Resources

Resource Pack 4

## Teaching sequence

### Introduction

Share Resource 5.1. Q: What do you think the pictures show?

Explain that archaeologists not only study artefacts (Lesson 3) and features (Lesson 4) found in the ground, but they also look closely for microscopic and macroscopic evidence that can be found in the soil.

Explain that archaeologists are able to reconstruct past environments and what the landscape looked like by using the evidence from the soil. Share Resource 5.2.

### Class learning

Take pupils outside and challenge the class to go on a soil hunt to discover what they can find hidden in the soil. Collect tablespoon-sized samples of

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soil and spread each sample out on a piece of paper or paper plate. Carefully sift through the soil sample using a toothpick or pencil. What can they spot in the soil? Are there parts of plants, insects, or seeds? Provide magnifying glasses so they can examine closely. What is the smallest thing they can find?

Take samples from different locations and observe if the soil colour, texture, or content differs.

Ensure pupils wash their hands thoroughly after the activity.

### Independent learning

Explain that soil samples were taken during the excavations at Ipplepen from different layers of soil at various depths. Archaeologists have used the evidence they found in the soil to describe what the environment was like during the Neolithic, Iron Age, and Roman periods. Using Resource 5.3, pupils complete the illustrations to show how the landscape has changed over time at Ipplepen. The environmental evidence may not provide a complete picture of what the landscape was like, so pupils may need to use their imagination a little to complete the images.

### Discussion

Compare and discuss their illustrations. What did they include or omit.

As a class, look out of the window and discuss what the landscape looks like around the school. What evidence would archaeologists find in the future? Pollen from woodlands? Seeds from exotic flowers in gardens? Grain from farmland?

### Extension suggestions

Ask pupils to add more illustrations to Resource 5.3. Include an image depicting what the landscape looks like today (referencing aerial images from Resource 1.4) and another showing their prediction of how it might look in the future (linking to discussions about climate change).

# Lesson 6: Reconstructing the past

## Introduction

Archaeologists bring together different pieces of evidence to give an interpretation of the past. Students will draw together all they have learnt about Ipplepen from the archaeological investigations and create their own interpretation board to share with other people.

## Lesson objective

To bring together information and create an interpretation board to share the discoveries at Ipplepen with the general public.

## National Curriculum links

Construct informed responses that involve thoughtful selection and organisation of relevant historical information.

## Resources

Large pieces of paper and pens

## Teaching sequence

### Introduction

The most important part of being an archaeologist is sharing any discoveries you have made.

Challenge the class to create their own interpretation board to be displayed in Ipplepen. The board should be easy to understand and visually appealing.

### Class learning

Generate ideas about what they need to include in their interpretation board. For example:

- Map: show the location of Ipplepen and where the archaeological site is within it.
- Illustrations: include drawings or photographs of artefacts found at the site.

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- Timeline: display a timeline showing the different periods of occupation (Prehistoric, Roman, Medieval) and key events.
  - Reconstruction drawings: include drawings or artist's reconstructions of what buildings or landscapes might have looked like in each period.
  - Discovery story: explain how the site was discovered and the archaeological investigations conducted.
  - Key findings: highlight important discoveries from each period.

Provide the children with copies of the *Prehistoric, Roman, and Medieval Ipplepen: Archaeological Investigations 2007–2019* booklet and their completed work to date to aid in their research and content creation.

This approach encourages students to engage creatively and comprehensively in presenting archaeological information while using available resources effectively.

### Independent learning

Encourage them to thoughtfully select the most important information to include on the interpretation panel

What will they include? What would they leave out?

This project can be extended over several sessions to allow students to research, plan, create drafts, and finalise their interpretation panel.

### Sharing

Children to present their interpretation panels to the class or the wider school community.

### Extension suggestions

How else could the information be presented to make it accessible to more people? Can the class produce podcasts, newspaper article or leaflets about the site.



# Resource Pack 1



Credit: Jim Wileman

Ipplepen through time



Credit: Chris Smart

I see...

I think...

I wonder...

## What is archaeology?

Archaeology is the study of the past and archaeologists are the people who study it.

Archaeologists are like detectives, finding clues from the landscape, artefacts and other sources to learn about how people lived in the past.



Credit: Jim Wileman



## What do archaeologists do?

Archaeologists study people in the past. We look at evidence that people have left behind to learn about what life was like in the past.

There are many different types of archaeologists who specialise in different areas. For example:

- Field archaeologists excavate or survey archaeological sites.
- Finds specialists study artefacts to tell us more about the people who made and used them.
- Environmental archaeologists look at evidence such as plant remains to learn about how people interacted with their environment.
- You can even be an underwater archaeologist and investigate archaeology in seas and lakes.

## How do you find out about the past?

It's a bit like detective work. You get clues from different sources and you have to combine them all to work out what happened in the past.

## Where do you look for clues?

There are many different sources of information. Here are a few examples:

- We can look at aerial photos and geophysical surveys to discover archaeological sites.
- To work out how old an archaeological site is, we can date artefacts found in the ground (using typology) or we can use scientific dating methods such as radiocarbon dating.
- Human bones can tell us about a person's height, age and any diseases they had.
- Studying ancient DNA can reveal people's hair, eye and skin colour. Finding jewellery, or occasionally fragments of clothing, can show us what people wore.
- Excavating the remains of houses can tell us where and how people lived.
- Animal bones and the remains of preserved grains, nuts and berries can reveal what people ate.
- The remains of plants and pollen, often preserved in wet places, can tell us what the landscape looked like.

# Key archaeological vocabulary

<b>Archaeology</b>	The study of people throughout history and prehistory. Archaeologists investigate the lives of people in the past, through the process of excavation, studying the artefacts and other physical remains found.
<b>Artefact</b>	An object made or used by people.
<b>Chronology</b>	The arrangement of events in order of how long ago they happened.
<b>Crop marks</b>	Visible patterns in crop growth caused by buried archaeological features, such as walls or ditches, visible from aerial photographs.
<b>Decay</b>	The process of the rotting of organic material over time through the action of bacteria and fungi.
<b>Excavation</b>	The process of carefully digging and uncovering layers of soil at an archaeological site to reveal structures, artefacts and other evidence of people in the past.
<b>Features</b>	Distinctive elements found on archaeological sites, such as walls, hearths, pits or postholes.
<b>Geophysical survey</b>	A survey that uses techniques like ground-penetrating radar and magnetometry to map features below the ground's surface to locate potential archaeological sites without excavation.
<b>Historic environment</b>	The physical remains that survive in the landscape today that were created by people in the past.
<b>Posthole</b>	A hole that is dug in the ground before a post (for a fence or building) is put in the ground.
<b>Stratigraphy</b>	The study of the layers of soil or rock in the ground. The deeper underground a layer is, the older it is.
<b>Trench</b>	An archaeological trench is the area of ground that is being excavated. On one site, there may be several archaeological trenches.
<b>Typology</b>	Archaeologists classify artefacts, such as pottery and stone tools, based on shared characteristics like shape, size, and decoration. By studying changes in these characteristics over time, archaeologists can estimate the age of the artefacts.

# Aerial image of Ipplepen archaeological site

— An aerial looking west over Ipplepen towards Torbay. The blue outline shows the approximate area of archaeological investigations.



Credit: Stephen Rippon

# Timeline information

These timeline cards show how the site at Ipplepen has been used by people and changed over time. The earliest evidence of people using this location dates back over 6,000 years.

## 4300 BC

Earliest evidence of people living at Ipplepen. People dug pits in the ground and dumped rubbish such as pottery, flint flakes and quern stones in them.

## 2000 BC

People appear to stop living at Ipplepen. No archaeological evidence has been found to show people lived here between about 2000 BC and AD 400

## 400 BC

During the Iron Age people start farming at Ipplepen and create a small settlement. They lived in roundhouses and kept animals such as sheep, cattle and pigs and grew crops such as wheat and barley.

## AD 50s

South West Britain was conquered by the Romans

## AD 50–AD100

A major road was constructed south from Exeter that ran through the settlement at Ipplepen. A larger village grew up beside the Roman road.

## AD 100s

A rectangular Roman style building was built at Ipplepen but most people continued to build and live in traditional roundhouses.

## AD 100–AD 410

While Britain was part of the Roman Empire, people in Ipplepen adopted aspects of the Roman lifestyle, including Roman fashion, drinking habits, and the use of coins for transactions.

## AD 410

Britain stopped being part of the Roman Empire

## AD 410–AD 800

Life continued at Ipplepen but people stopped using Roman coins for buying and selling items. There is less archaeological evidence from this period. People did not make their own pottery but may have used wooden vessels instead.

## AD 800

The settlement was abandoned by AD 800. The community probably moved west to where a Christian church had been built. The land where people had lived became farm land.

## AD 2007

Archaeologists first start to excavated the site at Ipplepen and discover the Roman features.

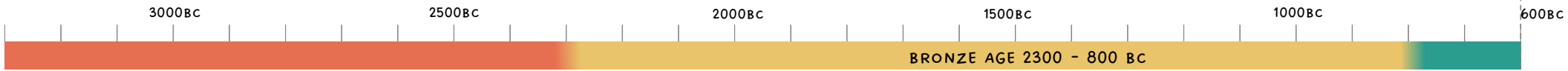
## AD 2019

Archaeological investigations at Ipplepen come to an end.



# Ipplepen timeline





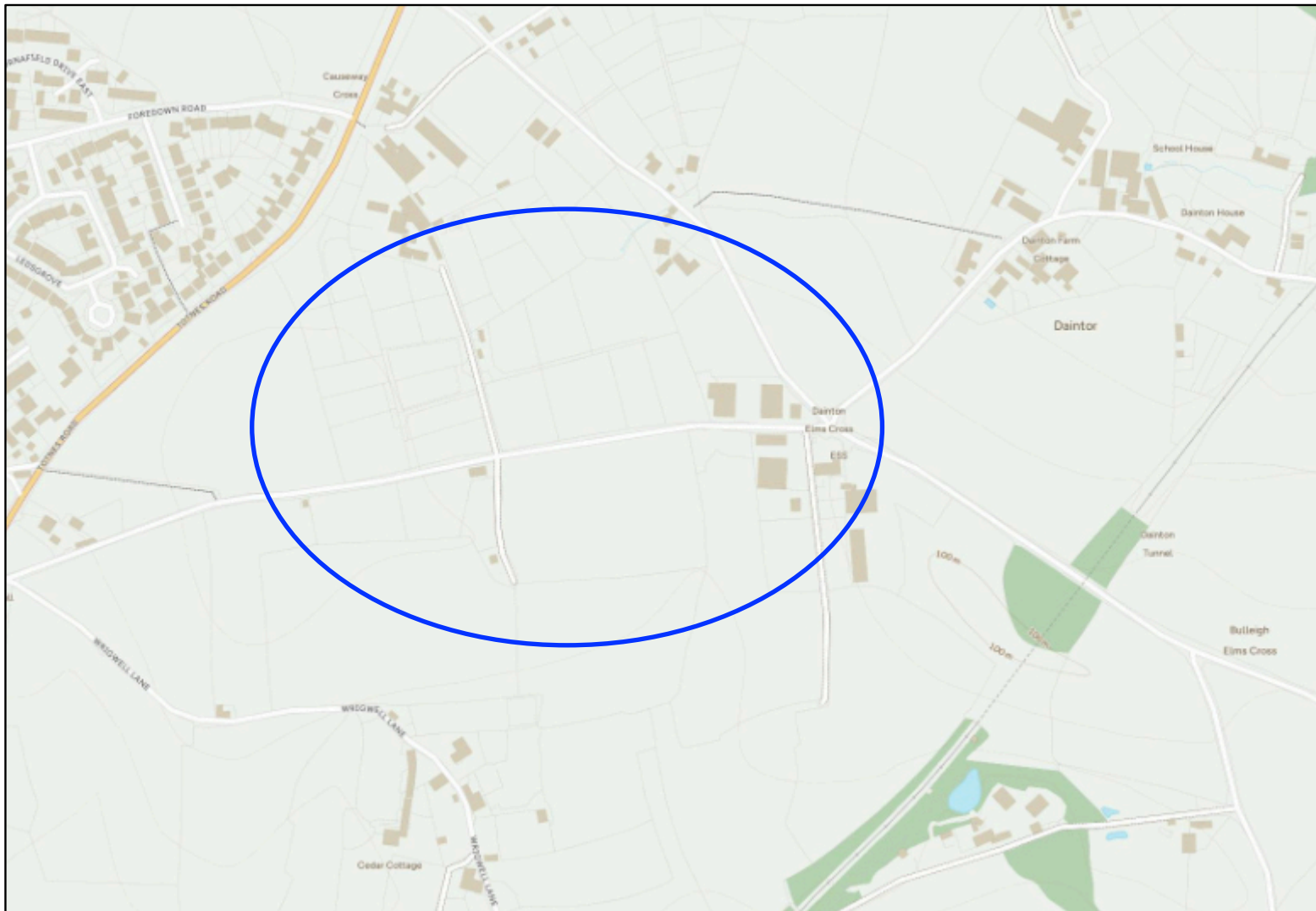



# Resource Pack 2



Ipplepen through time

# Map of Dainton Elms Cross, Ipplepen



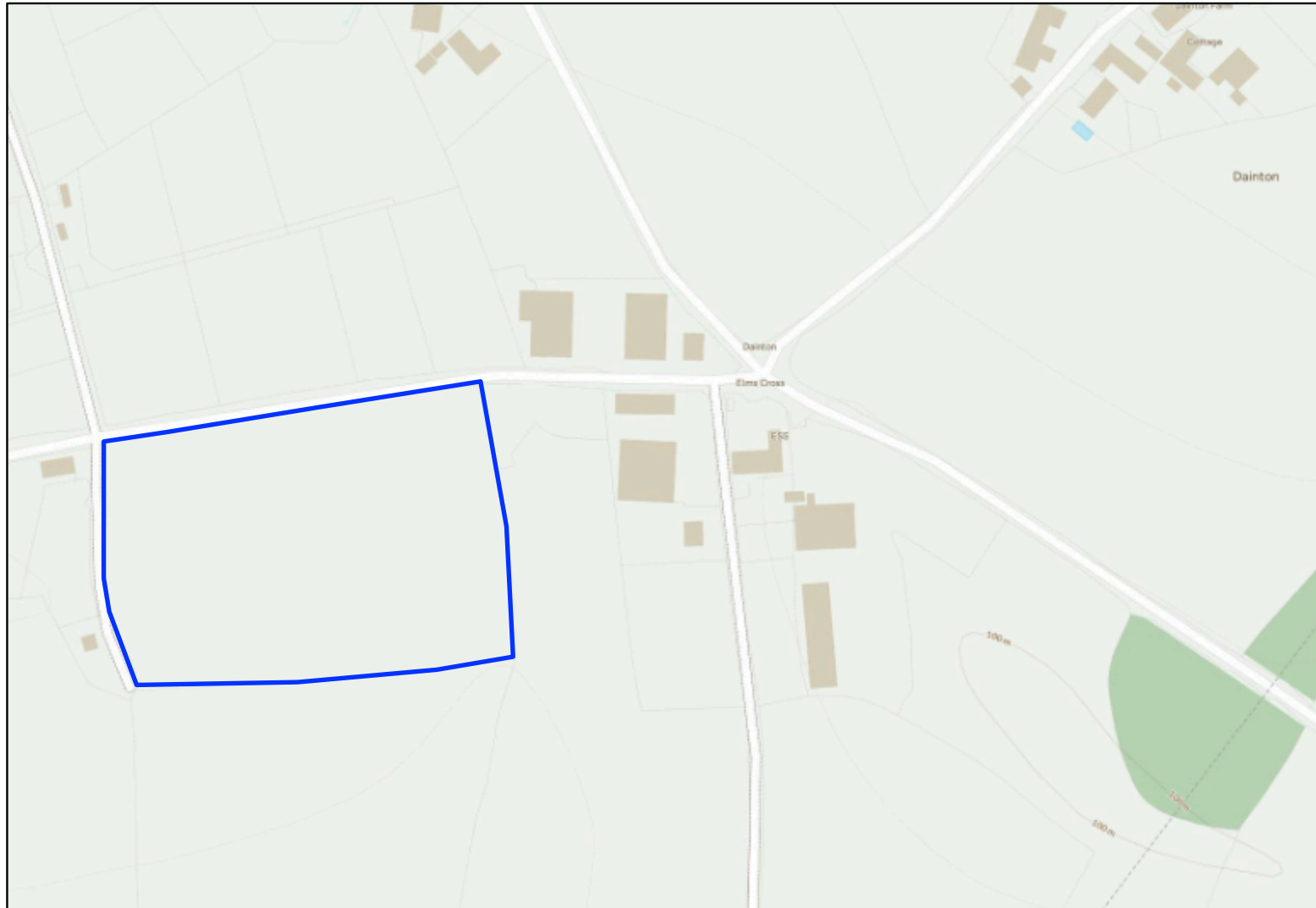
 The blue circle shows the approximate area of the archaeological investigations



100 metres  
(approximately)

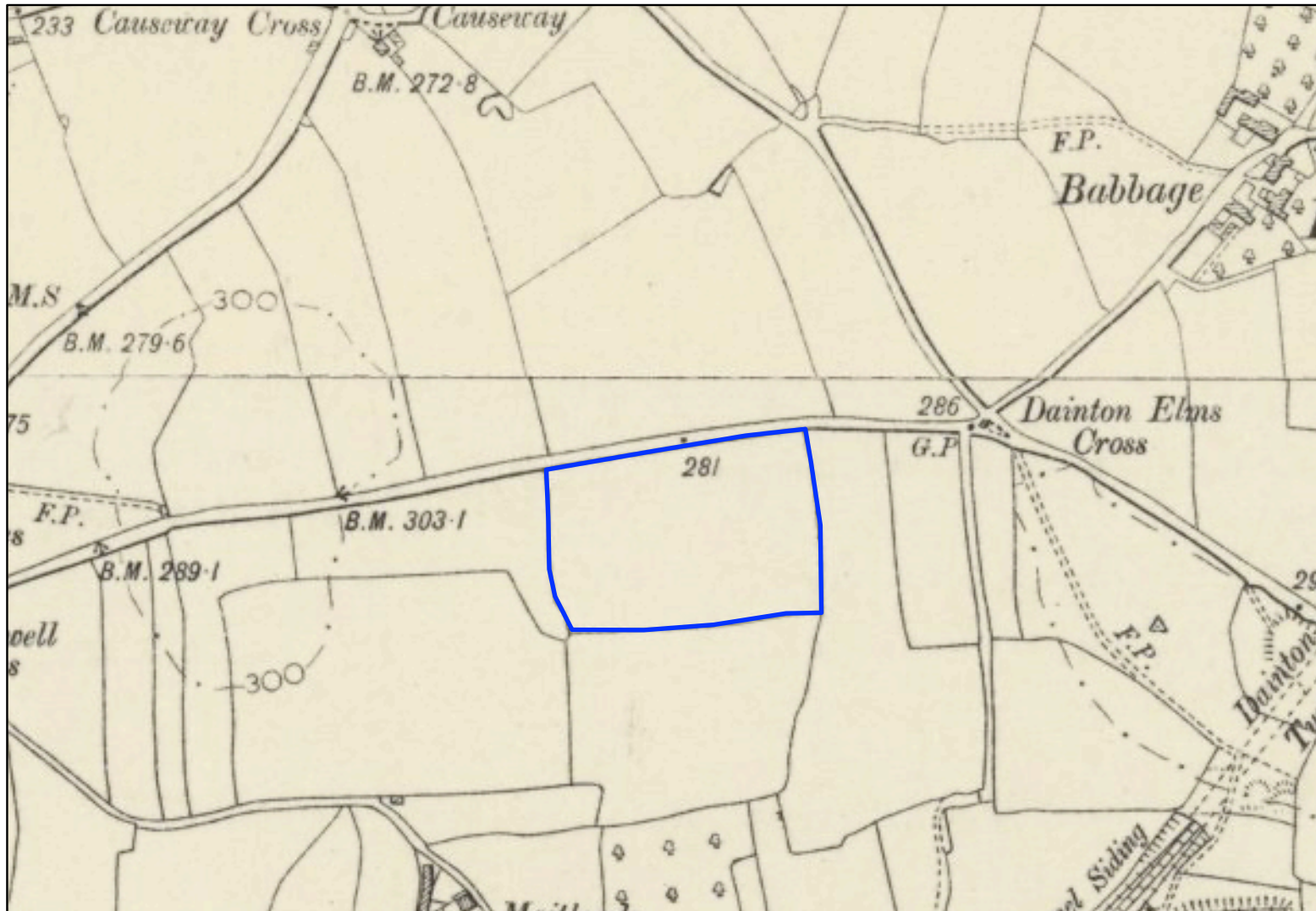
Credit: Ordnance Survey Open Data

# Map of Dainton Elms Cross, Ipplepen (close up)

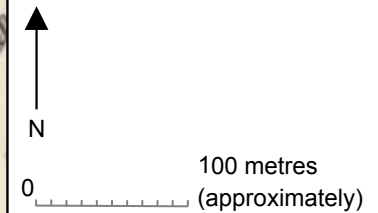


N  
0  
100 metres  
(approximately)  
Credit: Ordnance Survey Open Data

# Ordnance Survey map, 1906



An Ordnance Survey map made in 1906 showing Dainton Elms Cross, Ipplepen.

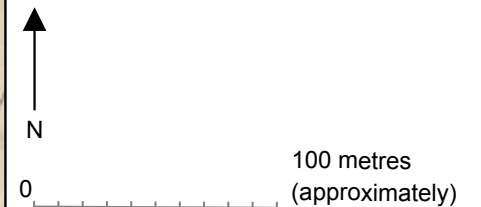


Credit: National Library of Scotland

# Tithe map, 1842



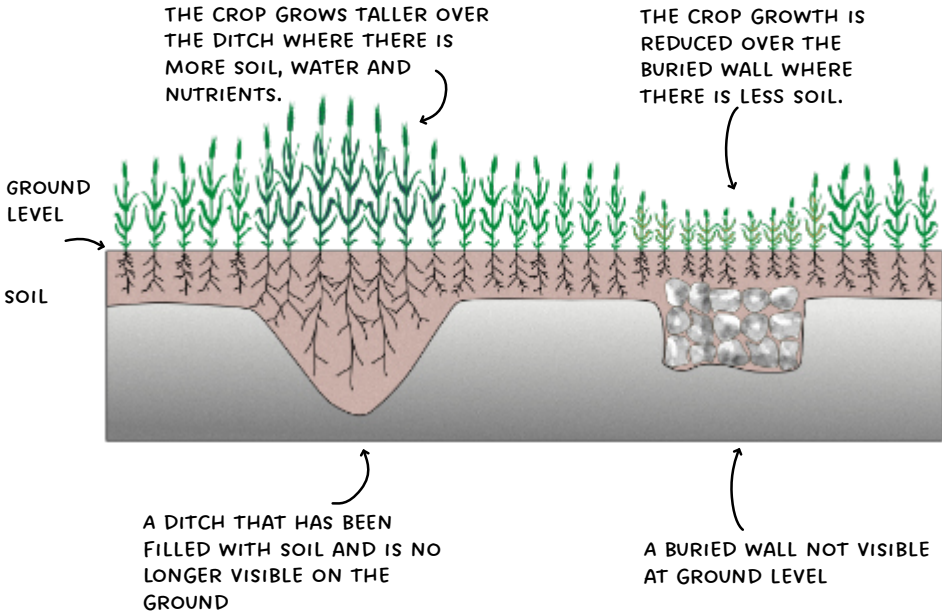
A Tithe map made in 1842 showing Dainton Elms Cross, Ipplepen





# What are crop marks?

Crop marks are patterns that appear in fields when certain plants grow differently above buried archaeological features like walls, ditches, or pits. These features can affect the growth of crops above them (see diagram below), causing variations in the height, colour, or density of the crop. When viewed from above, such differences create visible patterns in aerial photographs, helping archaeologists locate and map hidden structures.

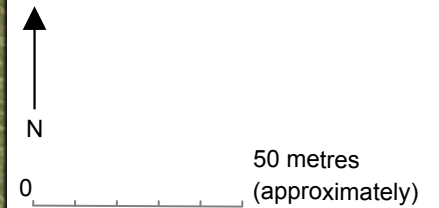


Credit: Google Earth, 2022

In the aerial photograph, you may notice changes in the colour of the grass growing in the field. These lines or patches are cropmarks and indicate that there could be buried archaeological features.

Can you see any of the crop marks? Where would you choose to excavate in this field if you were an archaeologist?


# Aerial image of Dainton Elms Cross, Ipplepen, 2022



Credit: Google Earth, 2022

# Crop marks at Dainton Elms Cross, Ipplepen, 2022



 Pink lines highlight the location of some of the visible crop marks.

N  
0 50 metres (approximately)

Credit: Google Earth, 2022

# What is a geophysical survey?

Geophysical surveys allow archaeologists to detect changes in the ground without needing to excavate. Archaeologists use geophysical surveys to give them information about a site, to map the extent of archaeological features and to pinpoint the best places to excavate.

The surveys involve the use of specialised equipment to measure various physical properties in the ground, such as magnetism and electrical conductivity. By analysing the data collected from these surveys, archaeologists can create detailed maps of buried features such as ditches, pits and walls.



Archaeologists and volunteers conducting a geophysical survey.

## GEOPHYSICAL SURVEY AT IPPLEPEN



Between 2010 and 2019, several geophysical surveys were undertaken at Ipplepen. The archaeologists used the data to produce a greyscale plot of the area (see image above). The survey identified a variety of archaeological features, such as buildings, trackways, and enclosures.

The geophysical surveys at Ipplepen are useful for showing the locations of buried archaeological features but cannot tell us how old the remains are.

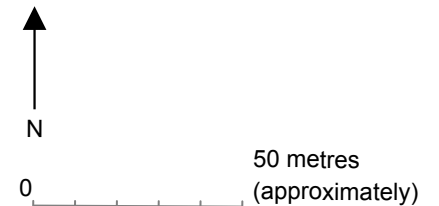
Archaeological excavation, targeting the features found in the geophysical survey, is used to date the archaeology. Excavations at Ipplepen have revealed that some of the features date back to the Neolithic period, while others are Iron Age, Roman, or Early Medieval in date.

# Geophysical survey at Dainton Elms Cross, Ipplepen

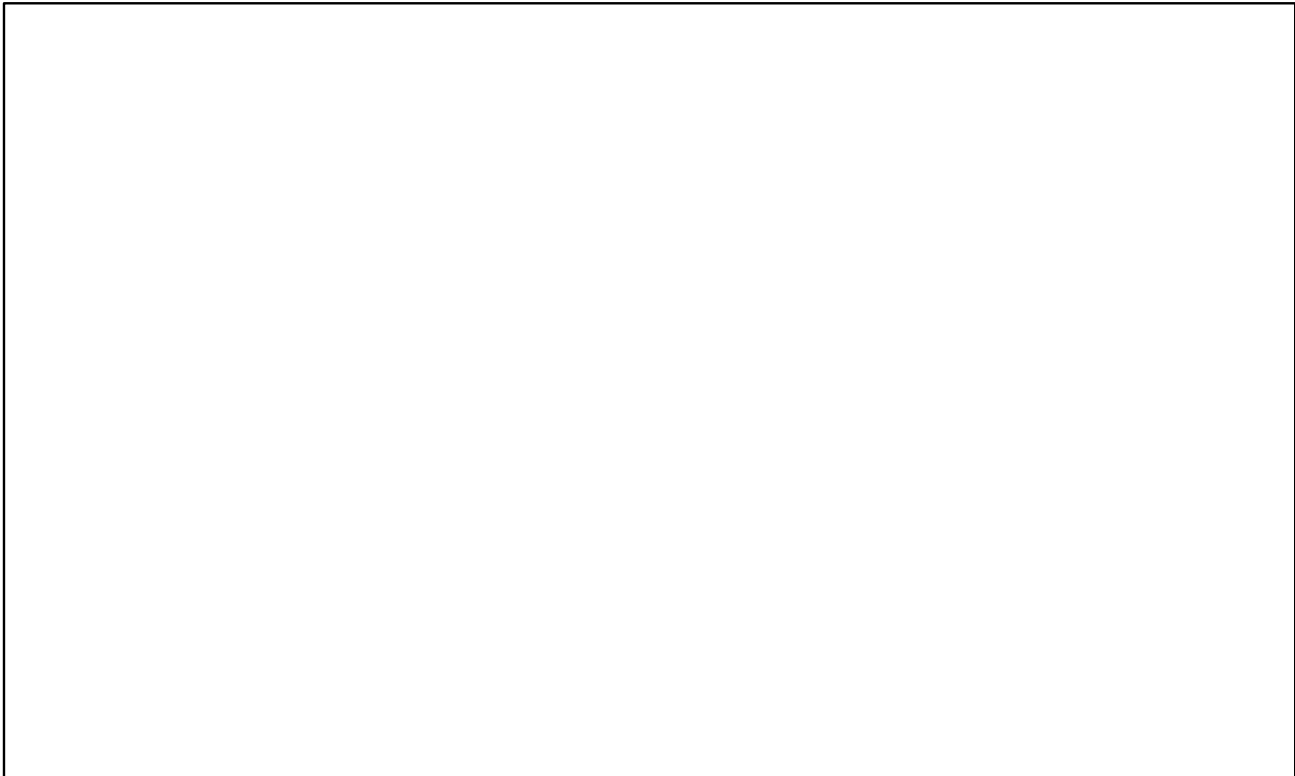
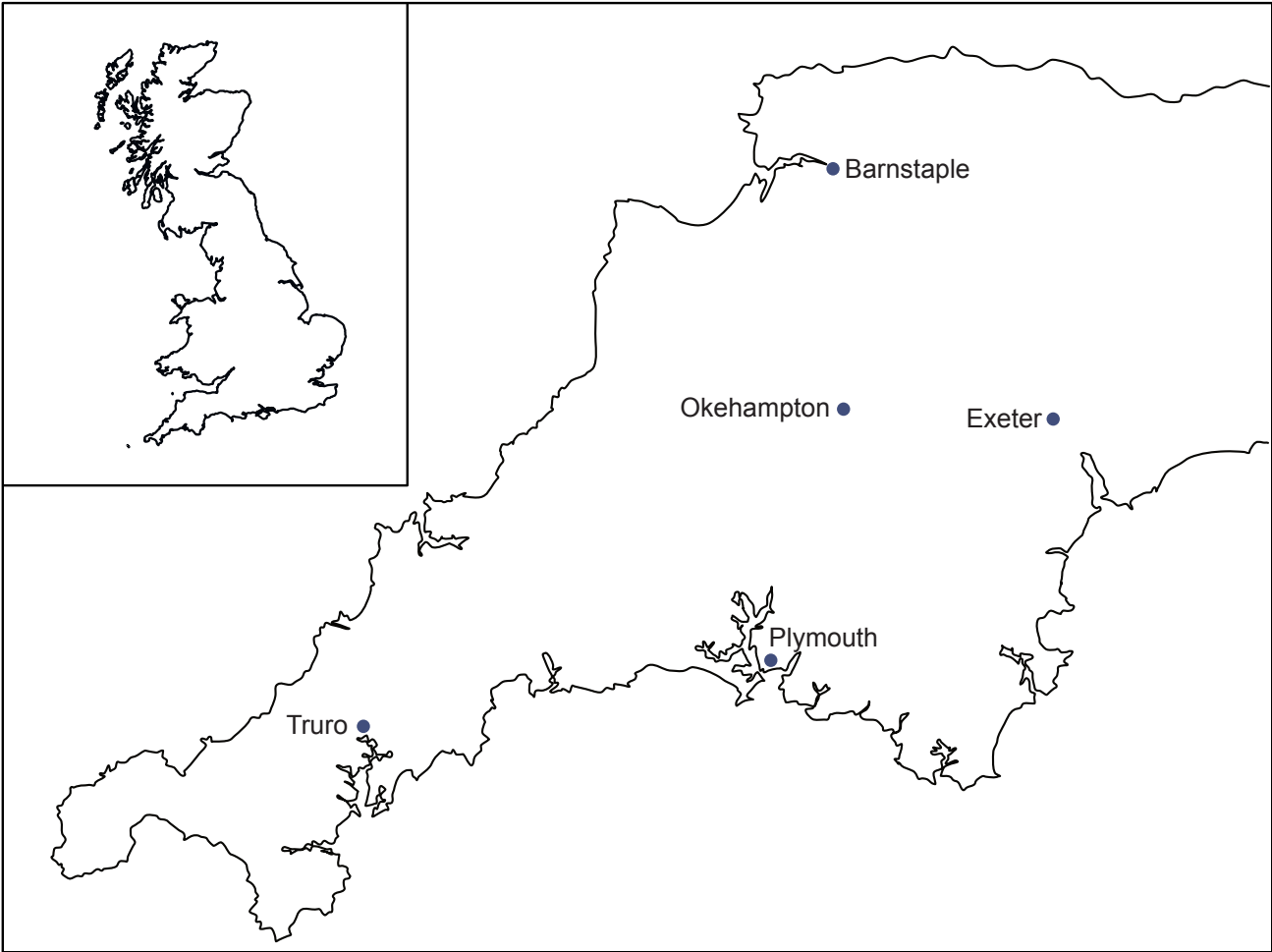
Geophysical surveys allow archaeologists to detect changes in the ground without disturbing the land. Archaeologists walk across the fields taking readings using specialist equipment to piece together a picture of what is below the ground.



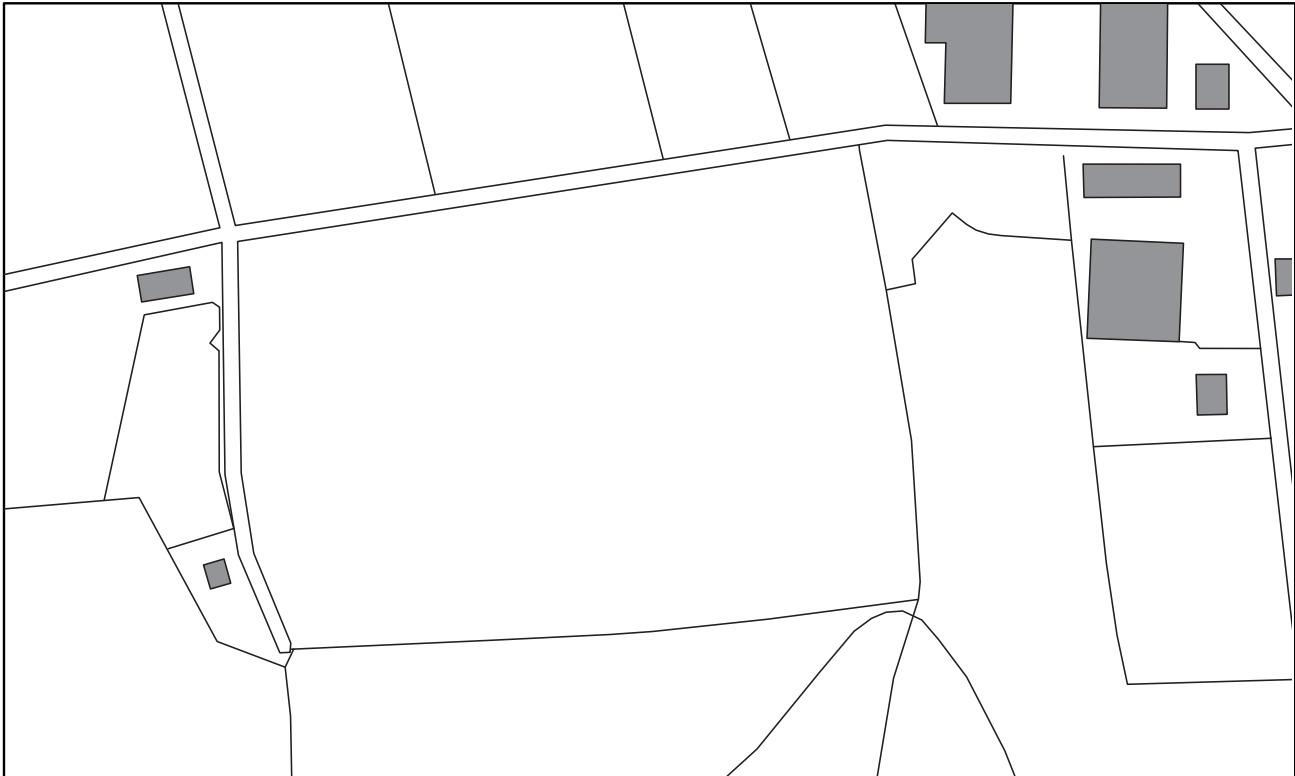
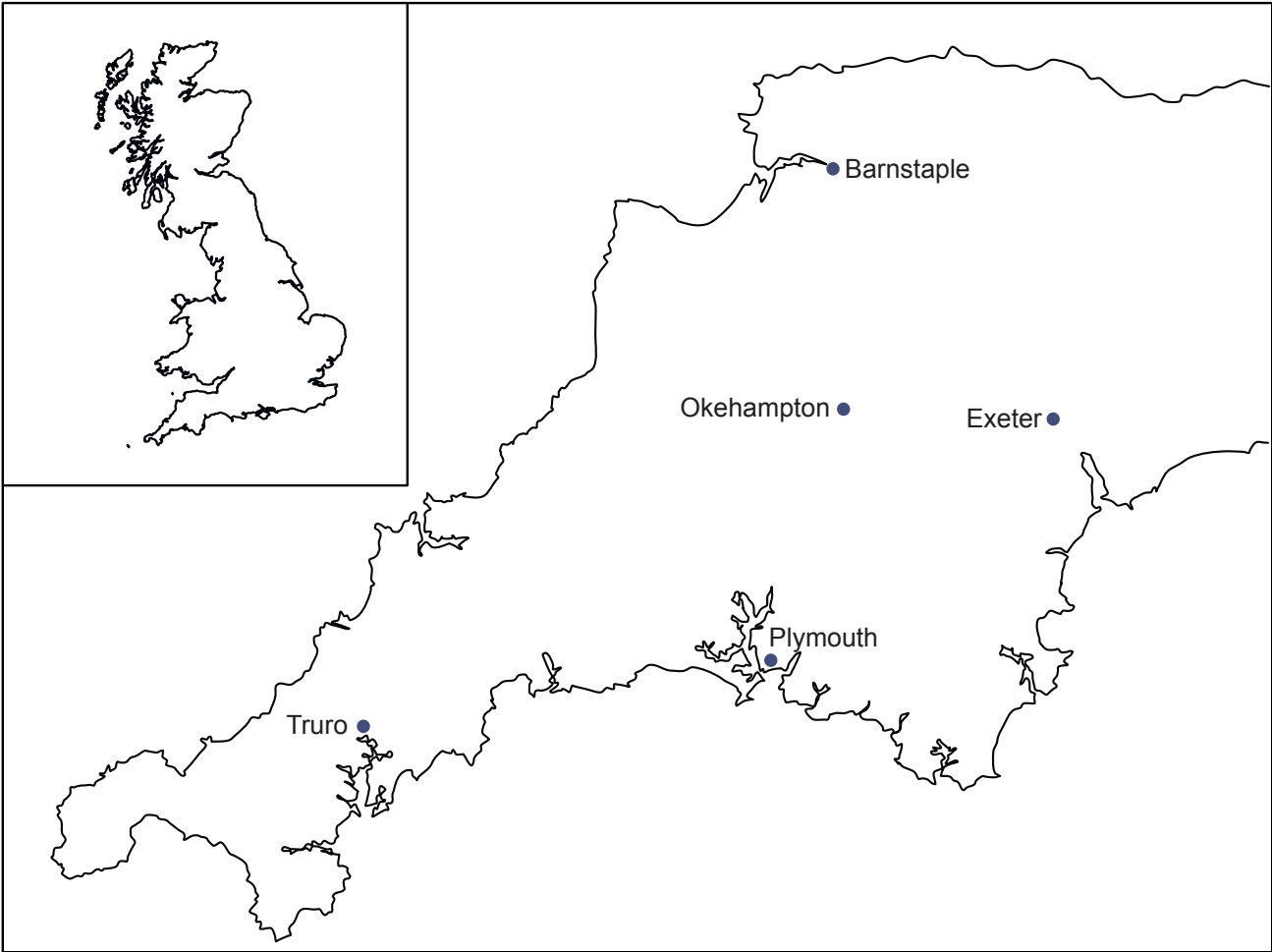
Geophysical survey results shown over the top of a map.



# Sketch location map



# Sketch location map



# Resource Pack 3



Ipplepen through time





Credit: Stephen Rippon

What do you think they will find?

Members of a Young Archaeologists Club excavating at Ipplepen.

# What would survive? What would decay?

Listed below are some of the materials Romans would have used. Separate the materials into two groups: material that is likely to survive buried in the ground and material that would rot away.

STONE                      WOOD                      ANIMAL SKINS

GOLD                      WOOL                      GLASS                      BASKETRY

LEATHER                      BONE                      IRON                      TIN                      SILVER

POTTERY                      FOOD                      COPPER

WHY ISN'T PLASTIC LISTED AS A MATERIAL USED BY THE ROMANS?

SURVIVES	DECAYS

Not everything that the Romans used would survive in the ground for archaeologists to find. All the organic materials, apart from bone, would normally rot away. Occasionally, some organic material can survive if it is waterlogged or burnt.

## What would survive buried in the ground?



Credit: Stephen Rippon

Re-enactors dressed in Roman military clothing showing what some soldiers would have worn during the Roman period in Britain. They are stood on the remains of the Roman road which passed through Ipplepen.

## Notes about Roman military dress

<b>Lorica Segmentata</b>	Lorica Segmentata or body armour was made of metal. It was flexible and joined with metal hinges, buckles and leather straps.
<b>Helmets</b>	Helmets had large metal ear and cheek flaps that were tied under chin.
<b>Short tunics</b>	Short tunics often made of wool and worn just above the knee.
<b>Sandals</b>	Sandals were made from leather with a sole, inner sole and upper tied with leather laces. Hobnails (made of iron) kept the leather inner and outer parts together and provided grip. Woollen socks were sometimes worn with the sandals.
<b>Cloaks &amp; capes</b>	Cloaks and capes were woollen and fastened together, often with a metal brooch.
<b>Belts</b>	Belts were made of leather and were used to hang a sword and dagger from. The buckles were made of metal or bone.
<b>Daggers</b>	Daggers were carried in and protected by a scabbard (case) often made of wood and leather.
<b>Swords</b>	Swords were also carried in a scabbard made of leather or wood.
<b>Shields</b>	Shields were made of wood and leather with iron or copper bosses.
<b>Spears</b>	Spears had a wooden shaft and an iron head and butt. They could be thrown or used as a thrusting weapon.
<b>Tools</b>	Soldiers would carry various tools including a pick axe for digging (during road building or ground clearance for example).

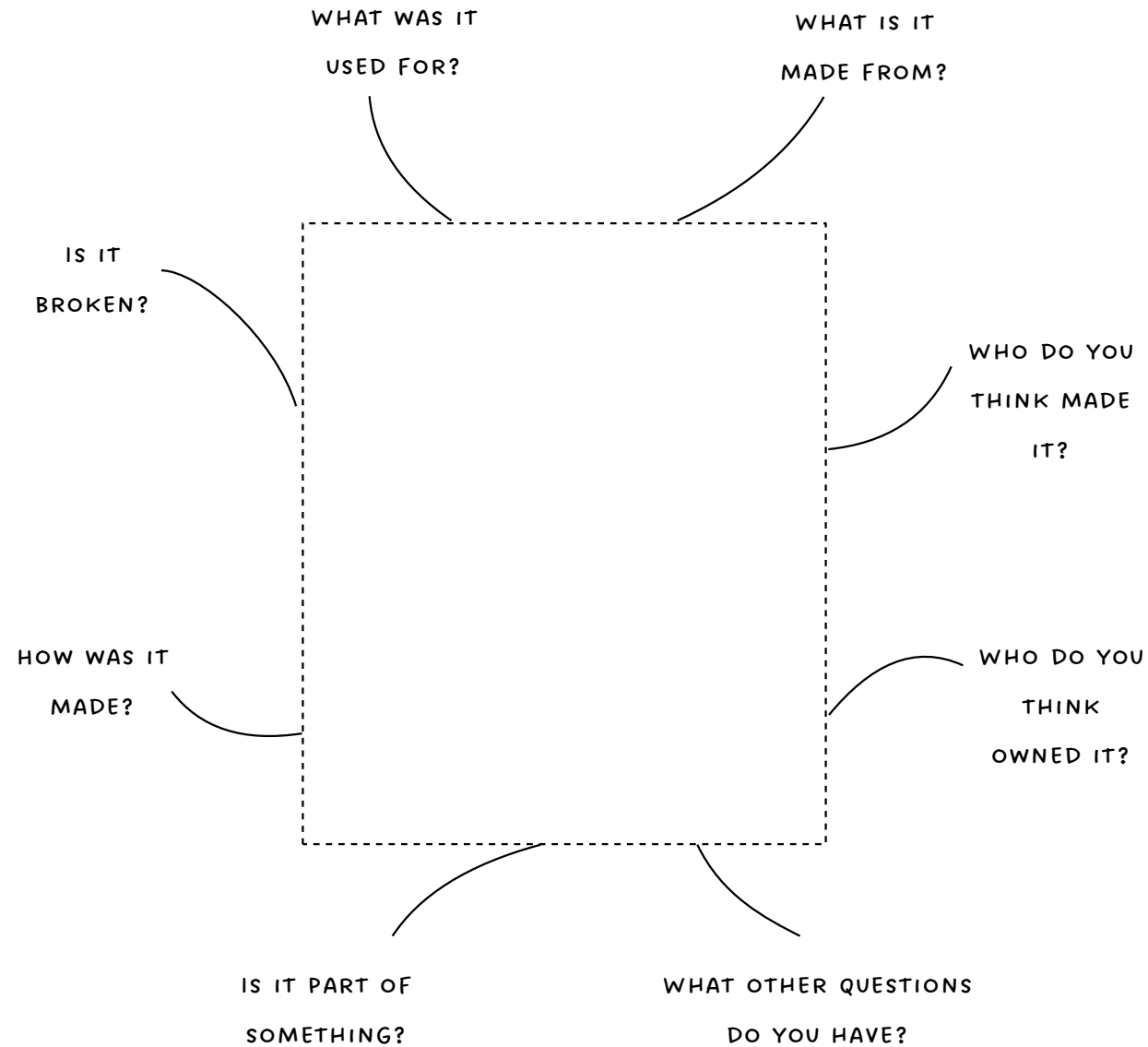
# What would survive buried in the ground?



Credit: Stephen Rippon

A re-enactor dressed in Roman-style clothing. She is writing using tools and materials known to have been used by people living in Roman-period Britain.

# Artefact discussion sheet



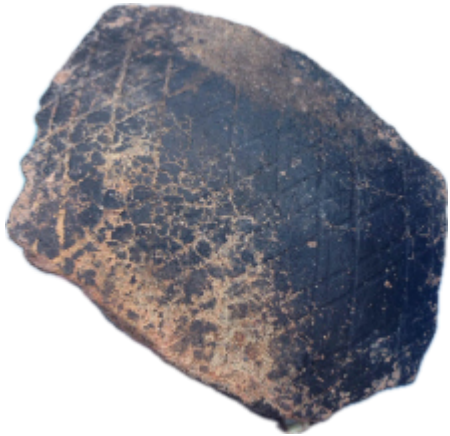
# Artefact image cards



# Artefact image cards



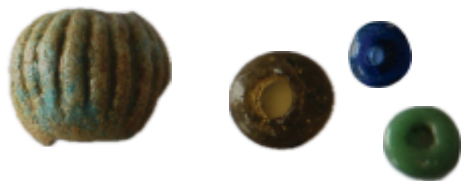




# Artefact image cards



### Glass beads



Here is a selection of Roman beads made from glass. The bead on the left is called a melon bead, named for its melon shape. The colourful beads were used for decoration and made into jewellery. Some may have had other functions, such as being used as toggles for fastening clothing.

### Brooch



This is a Roman bow and fantail brooch made of copper alloy with enamel sections, dating to the 1st or 2nd century AD. Brooches were used by both men and women in the Roman period for fastening clothing because buttons were not used in Britain until the Medieval period.

### Animal bone with cut



If you look closely at this cattle bone, you can see straight cut marks on the surface. These were made by a sharp tool that cut into the bone when the animal was butchered. This indicates the animal was processed and used as a food source.

### Roman coin



A total of 307 Roman coins have been found at Ipplepen. The introduction of coins shows the spread of Roman influence. The coins enabled people to make, sell, and buy goods, allowing the economy to grow. The coins at Ipplepen indicate that the community was trading agricultural and industrial products throughout the entire Roman period.

### Animal bone



This is the jaw bone of a sheep. A large amount of animal bone was found at Ipplepen, including pig, sheep, cattle, chicken, dog and horse. Animals were kept not only for their meat and milk but also other purposes. Cattle for pulling ploughs, sheep for wool, and their bones for tool-making.

### Hob nails



Hobnails were studs that Roman soldiers pushed into the base of their leather sandals to make them last longer and provide better grip. While the leather sandals rot away underground, the hobnails, made of iron, survive but corrode, obscuring their original shape.

## Artefact cards

### Brooch



This is part of a copper-alloy brooch. It is broken and missing its hinge and catch plate. When it was in use it would have fastened clothing such as cloaks. This style of brooch dates to the late 1<sup>st</sup> century AD.

### Pierced slate



This piece of slate is likely to have been a roof tile. Most of the buildings at Ipplepen were roundhouses with thatched roofs, but this artefact shows that there were some Roman-style buildings with tiled roofs.

### Roman glazed pottery



This broken piece of pottery is from a Roman beaker used for drinking. It is decorated with an incised pattern and an olive green glaze. This is a very unusual find, as it is the first time that Roman glazed pottery has been discovered in south-western Britain.

## Artefact cards

### Slag



Slag is material left over from metalworking. Large amounts were found at Ipplepen showing that there was a blacksmith's forge in the south-western part of the settlement.

### Part of a crucible



A crucible is a container used for melting and holding metals at high temperatures. This find shows that people were melting copper alloy and using it to cast metal objects such as brooches and bracelets.

### Samian ware



Samian is fine quality tableware found across the Roman Empire. The examples found in Ipplepen were probably made in the South of France and are evidence of long-distance trade in luxury goods. The pottery is often highly decorated and would have been valuable to its owners.

Pottery jar



This pottery sherd is a broken part of a pot that would have been used as a food storage jar or cooking pot. This type of pottery, known as Black-burnished ware, was made in eastern Devon and south-eastern Dorset.

Bracelet



Here is a copper-alloy Roman bracelet that would have been worn by a person on their wrist. It is made from two strands of metal twisted together to give it a cable rope appearance.

Quern stone



Quern stones were used for grinding wheat into flour. Grains would be placed between two querns with the top one rotated over the bottom one to grind the grain into flour. This flour was then made into bread.

Roman glass



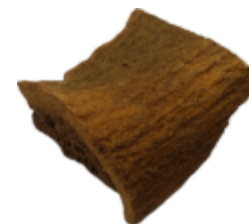
This was part of a fine glass drinking vessel. People would have used these Roman-style glasses to drink wine, which was imported into Ipplepen from Italy or France in large amphorae jars.

Amphora



This is a part of an amphora, a large pottery vessel used for transporting wet foodstuffs and liquids around the Roman Empire. It may have contained olive oil or fish sauce imported from southern Spain, or wine from the South of France or southern Italy.

Cut antler



This is a piece of red-deer antler found in a Roman ditch. It was cut into a piece that was 5 cm long, providing evidence that people were processing and potentially making items from antler at Ipplepen.

## Artefact cards

# Resource Pack 4



Credit: Jim Wileman

Ippepen through time

# Archaeological processes: playdough activity

Aim – to demonstrate how features such as postholes and pits found by archaeologists on excavations are formed.

Resources – playdough, tray, sticks, paper, lentils (or similar), sand, brushes.



1. Spread playdough out in a shallow tray to create a smooth, level surface suitable for building a roundhouse or a rectangular Roman-style structure.



2. Build the structure. Push sticks into the playdough to create walls, make a depression for the lentils to form a path, and add a roof and any other details.



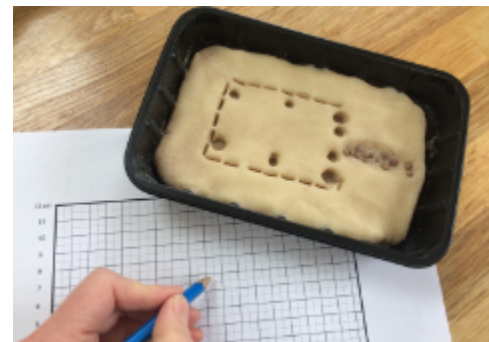
3. Imagine the building is abandoned. Carefully remove the sticks and any material that would decay or be taken away. Look at the pattern left in the playdough. This represents what happens in the soil.



4. The postholes, pits, paths, and ditches would be backfilled and, over time, covered with soil. Years later, there would be no clue what 'features' lie below the ground. Cover the playdough with sand to represent this process.



5. Archaeologists excavating the site hundreds of years later would carefully remove the top layer of soil to reveal the features. They would then excavate each posthole or feature individually, collecting any artefacts.



6. Whilst excavating, archaeologists would photograph and draw plans of all the features they excavate, fully recording everything they find.

# Archaeological features

These four photos were taken at Ipplepen while archaeologists were excavating or recording different archaeological features.



1. Two archaeologists are excavating a section through a ditch that had been filled with soil. They are collecting the artefacts they find in the tray at the front of the picture.

2. This photograph shows part of the Roman road that passed through the site at Ipplepen. The stone surface that is visible was the first road surface laid down here by the Romans.



3. An archaeologist is digging out a well that has been cut into the bedrock. The well was dug to provide fresh water for the community.

4. Here, an archaeologist is recording a posthole that they have excavated.

# Archaeological recording

Archaeologists record all the features they excavate by making drawn, written, and photographic records.

In the photograph to the right, an archaeologist is carefully drawing a scale plan of the feature they have excavated. Each feature is given its own unique number, which is added to all the written, drawn, and photographic records. This enables archaeologists to keep track of all the information and have an accurate record to refer back to. The records describe exactly what the feature was like and provide insights into what it might have been.



This is a cleaned archaeological trench containing the remains of various archaeological features, including a roundhouse.



This is an accurate scale drawing of the same trench showing all the different archaeological features.



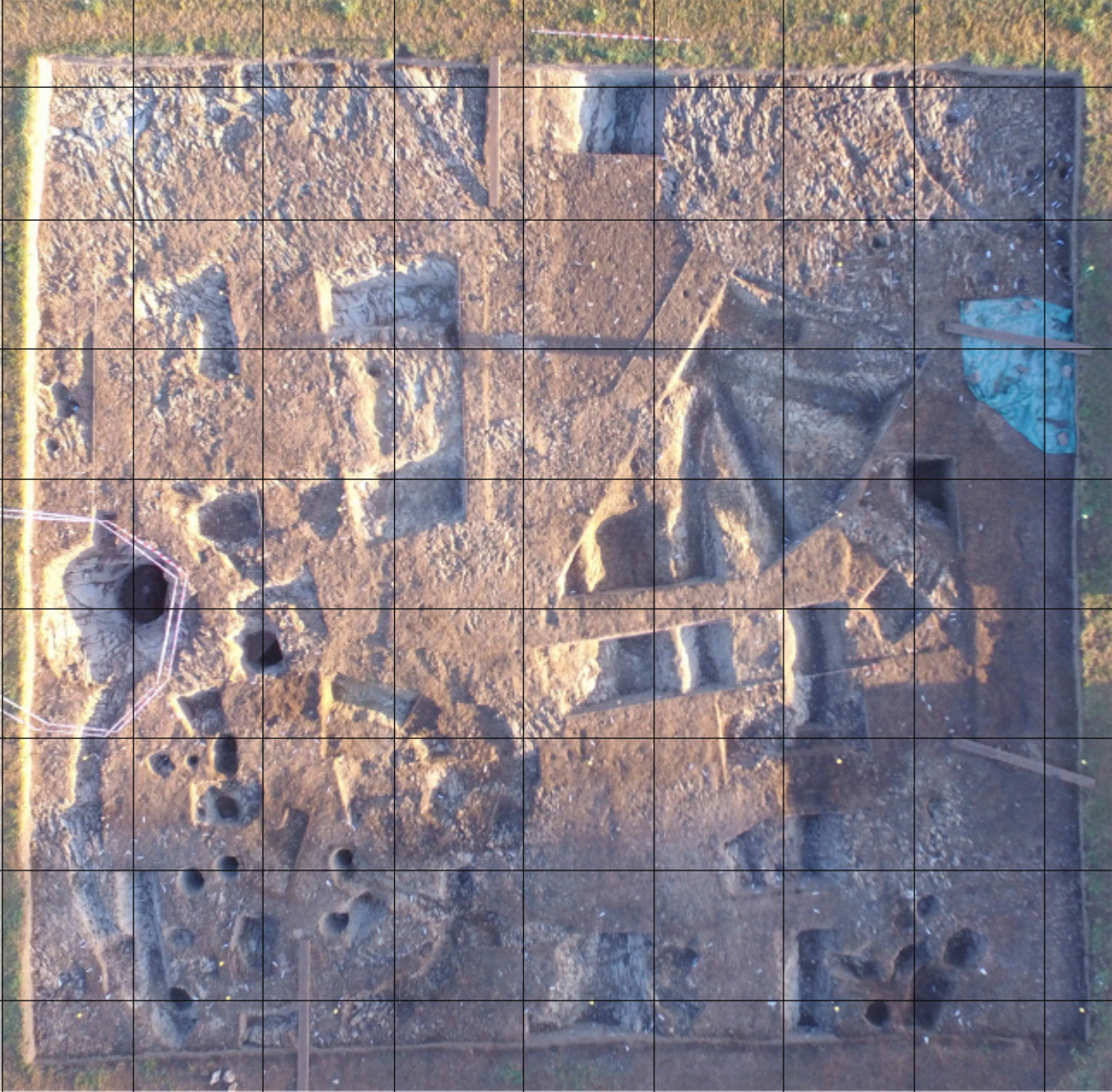




### Archaeological trench at Ipplepen

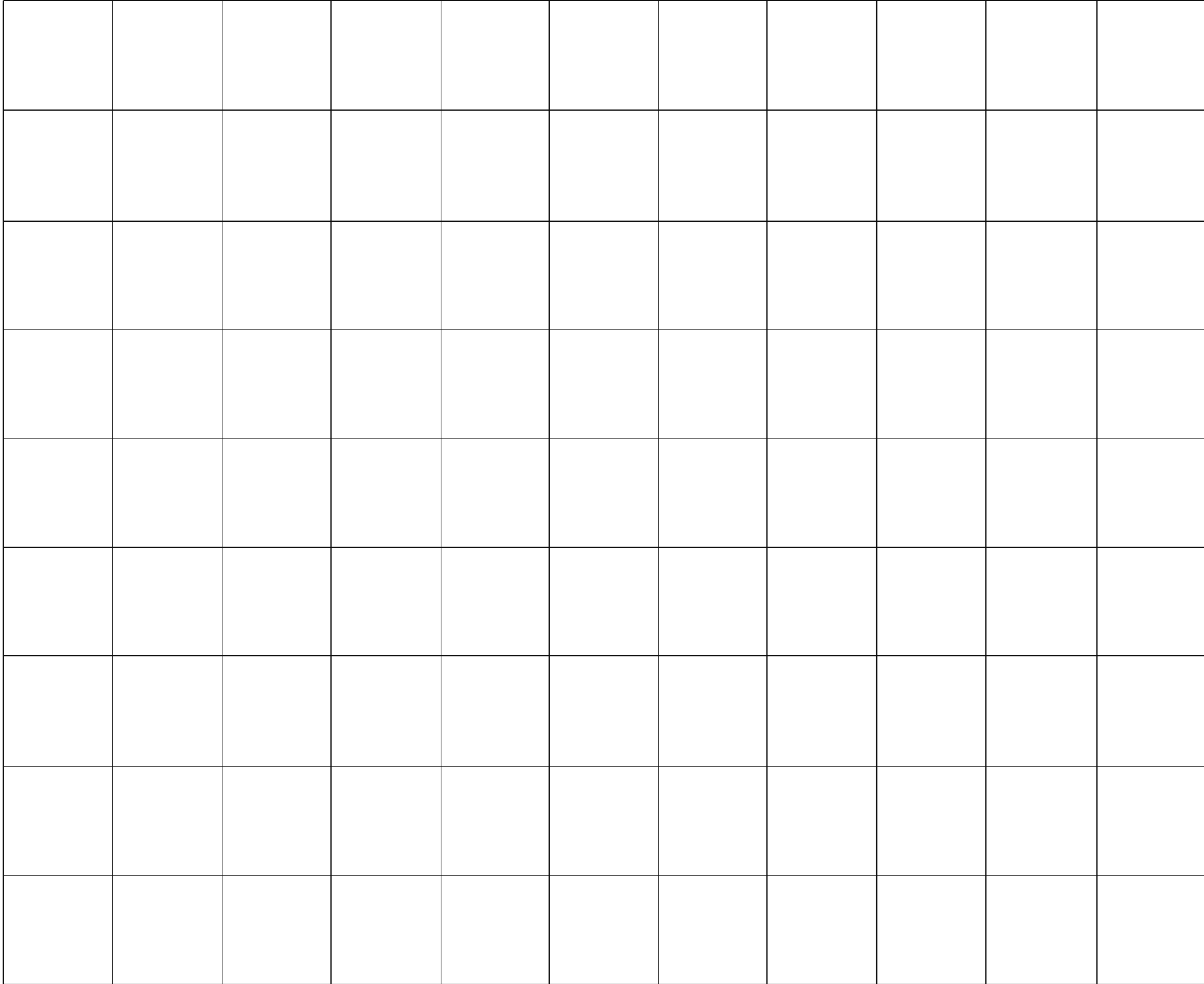
In this archaeological trench, the turf was removed and the topsoil carefully dug away to reveal the archaeological features below.

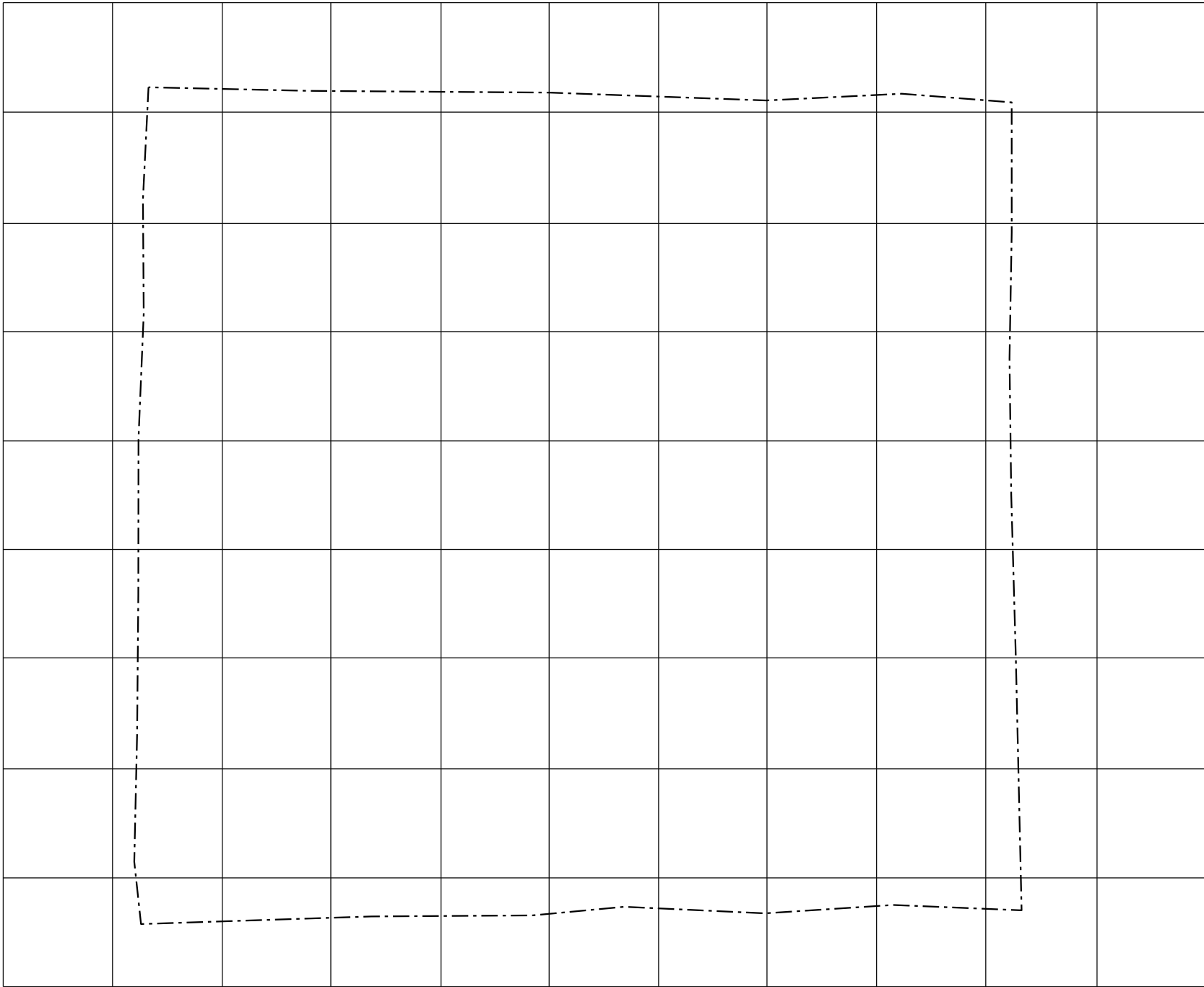
These features include remnants of ditches, pits, postholes, as well as a roundhouse.



Archaeological trench at Ipplepen with grid

Blank grid for  
drawing  
archaeological  
trench





Blank grid with trench outline

Archaeological trench with explanation of features



Ditch

A pit dug into the ground into which rubbish was dumped.

A deep well used as a source of water.

A drip gully showing the location of a roundhouse.

Trench edge

# Resource Pack 5



Ippelen through time

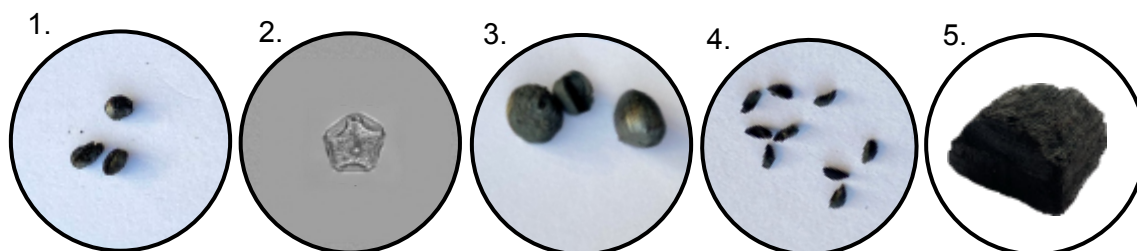
# What do you think these pictures show?



Credit: Image 2. Wanderfee11 - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=47867181>

# Environmental evidence

Evidence can be found in the ground that enables archaeologists to reconstruct what landscapes looked like in the past.



These are some examples of the types of environmental evidence that archaeologists might find.

1. Charred cereal grains.
2. Pollen grain from an alder tree
3. Charred hazel nuts and the cap of an acorn from an oak tree.
4. Onion seeds
5. Wood charcoal



University of Exeter students wet sieving soil samples at Ipplepen.

Soil can hold much evidence that is not always visible to archaeologists when excavating. Therefore, archaeologists collect samples of the soil. The soil is either taken back to the laboratory for processing or wet sieved at the archaeological site.

Micro and macroscopic remains of plants, insects, snails, mammals, birds, and fish can be found in the soil. Archaeologists use this evidence to determine the plants and animals that were present in the landscape and how they might have been used by the people living at the time.



# How the landscape changed at Ipplepen over time

Neolithic period

During the Neolithic period, there is evidence to show that people had started to grow wheat, so some areas of the landscape were cleared for small fields. However, there were still many wild, natural areas where people could forage for food such as hazelnuts.

Iron Age

In the Iron Age, there were small farming settlements with cattle, sheep, and pigs, along with domestic dogs. Fields were planted with wheat, barley, and oats. It is very likely that there were trees and woodlands nearby.

Roman period

Throughout the Roman period, people continued to farm and kept cattle, sheep, pigs, chickens, dogs, and horses. They grew wheat, barley, oats, and beans (similar to broad beans). Wild animals living around the settlement included badgers, red deer, and squirrels, suggesting that there were trees and woods in the surrounding landscape.