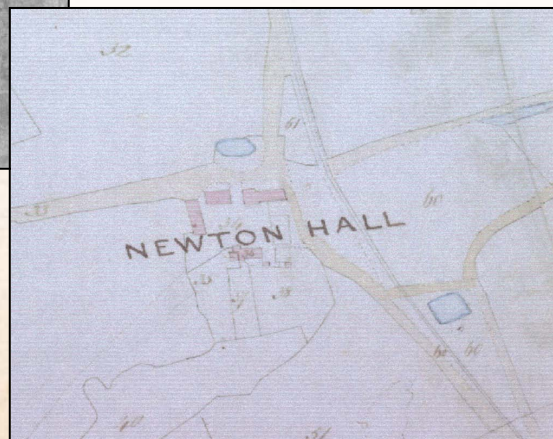
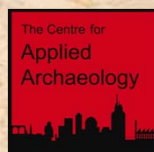


Newton Hall Schools Activity Pack



**Information and activities on
archaeology and the history
of Newton Hall for Key Stage
1 and 2 students.**



Archaeology Factsheet

What is Archaeology?

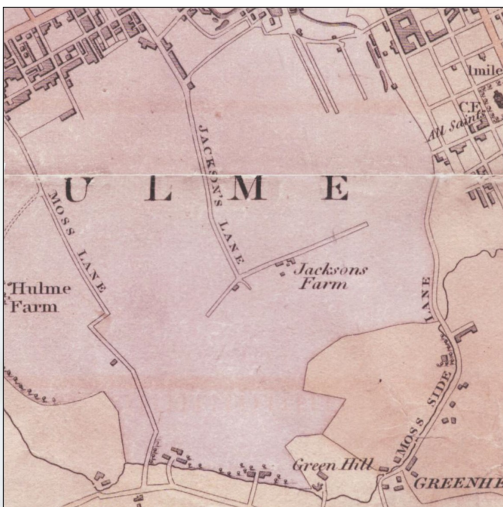
Well, archaeology is lots of things from researching to digging and surveying to drawing. Archaeology is a way of studying people's lives in the past using the physical evidence they left behind. It is different from history which relies on written evidence but can be used alongside it to give a better picture of the past.

Archaeology uses clues from buildings, the landscape, objects and buried remains to tell us all sorts of things about how people lived in the past. All archaeologists have to do is put the clues together to find out what happened, just like a detective!



Why do we do it?

Archaeology can help us to understand how ordinary people lived rather than just the famous and powerful ones that are often mentioned in history books. This is because archaeology looks at rubbish and other things left behind from people's daily lives which were rarely written about.



How do we know where to look?

Archaeologists can get clues about where to look for evidence of the past from secondary sources like maps, census returns and written accounts from history. But they can also use more scientific methods too, like geophysical surveying and ground penetrating radar. These are ways of seeing below the ground using electrical currents and the earth's magnetic field. All these clues help to show archaeologists where to investigate the past.

How do we investigate it?

There are different ways that archaeology can be used to find out about the past. Sometimes documents are studied and researched or old buildings are measured and photographed. If there is nothing still standing above ground the investigation will involve digging to find clues and then recording what is found.

Using Maps

Looking back through old maps is a really easy way of comparing how an area looked in the past to how it looks now. They can show you where buildings have been built and demolished and how the land has changed, like farmland becoming a housing estate.

Maps are often the first place archaeologists look when they are researching an area as they are easy to read and often very accurate.

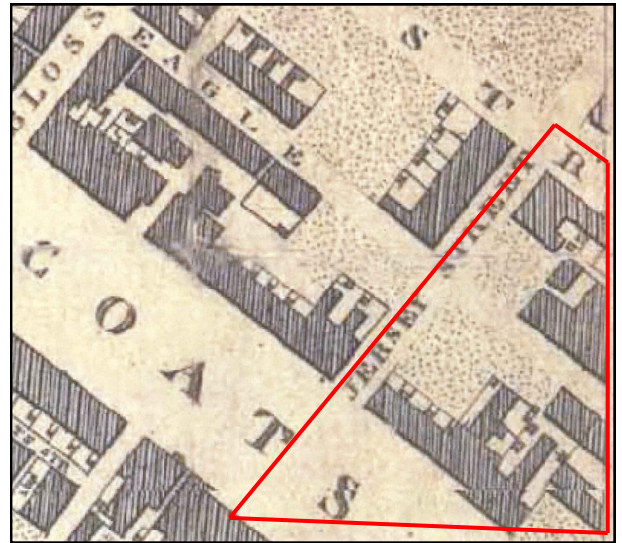
Historic maps fall into 3 groups:

- Ordnance survey (OS) - these were made by the government from the early 1800s and are still produced today! These maps cover the whole of the UK.
- Tithe maps - a tithe was an amount of money or grain that each landowner paid to the church, 10% of their produce. The tithe maps were made to show who owned land and what it was used for in each parish. These were made in the mid 1800s but didn't always cover every parish, so they were accurate but less reliable than the OS.
- Privately made maps - these were made for all sorts of reasons to show layouts of towns and cities or all lands owned by a Lord or rivers used for the transport of goods. These maps were made from medieval times but were not always very accurate and only covered certain areas.

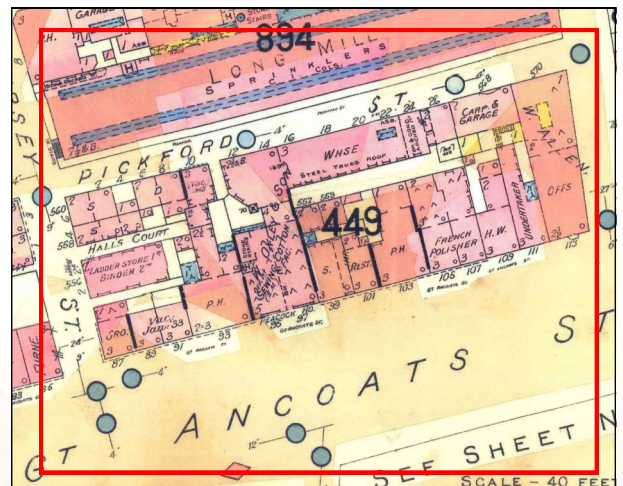
These maps show the same area at different times (inside the red box).

See if you can spot what has changed and what has stayed the same. Has the character of the area changed i.e. Have buildings changed their shape or size, have roads moved etc.?

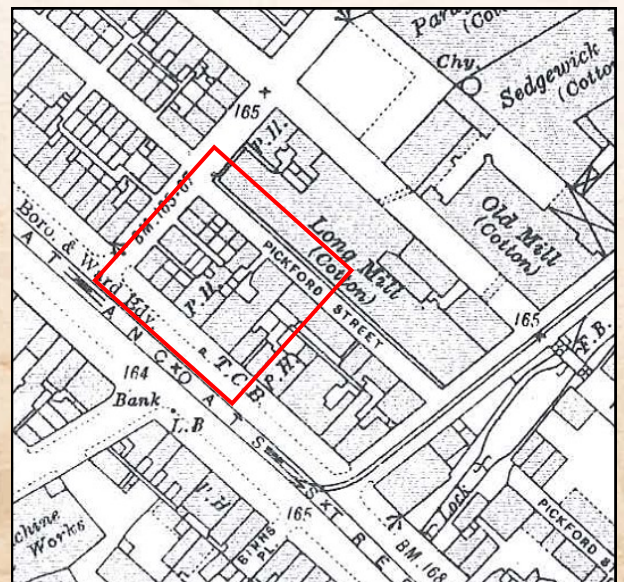
Are there any words or symbols you recognise from modern maps?



1797



1888



1932

Using Historic Documents

[illegible]

Historical documents are really good for telling us about the people and things that used the buildings we find on maps.

These documents can really help us fill in the details of ordinary peoples lives. They record names, birthdays, jobs, marriages and sometimes great deeds these people did!

They also help us to see how people in the past thought and what they considered to be important.

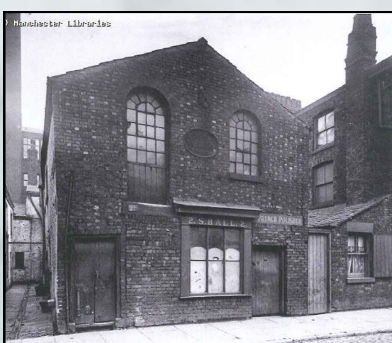
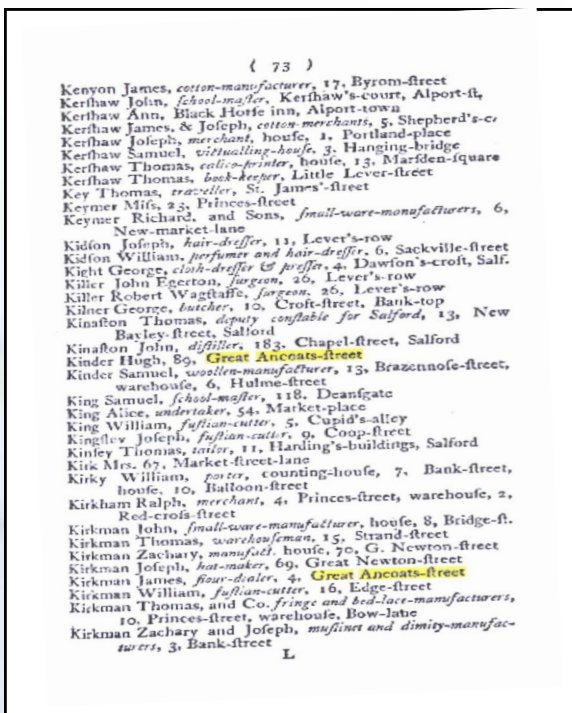
There are all sorts of records surviving from the past, so here are the most common ones that archaeologists use:

- **Census** - this is a count of all the people in Britain and what they did, where they lived and who with. It is done every 10 years since 1801, so it's really good for following people through time!
- **Trade directories** - these are like the modern yellow pages and list the jobs and businesses of everybody in an area. They tell us names, addresses, and jobs so they can help us to find out what a building was used for.
- **Photographs** - cameras were invented in the mid 19th century and people have been taking pictures of their lives ever since. These are really useful as they can show us how people and places actually looked and show details not mentioned in written records.

Other useful records include church and company registers, newspapers and diaries.

- All the documents on this page relate to the area shown on the maps we looked at.

All of these resources, both maps and documents, can be found in your local studies library or try old-maps.co.uk and ancestry.co.uk



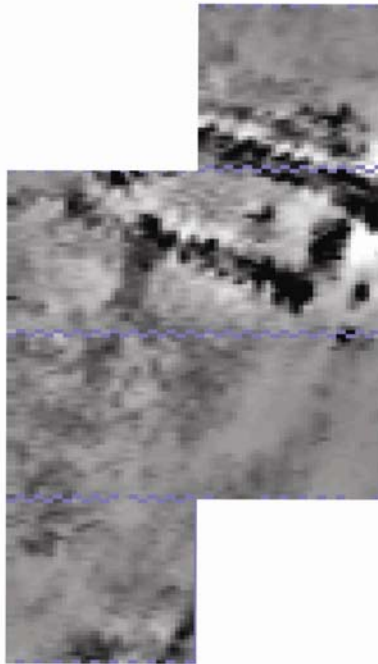
Using Geophysics


Once archaeologists have found an interesting site on historic maps they use geophysics to give them a picture of what is below the ground.

Geophysics uses the earth's electrical or magnetic field to sense what lies below ground, this is called resistivity or magnetometry.

A machine is used to pass an electrical current through the ground or measure the ground's magnetism which is affected by what is buried. So if the electric current hits a brick wall it will travel more slowly or if there is something made of metal in the ground this will change its magnetism.

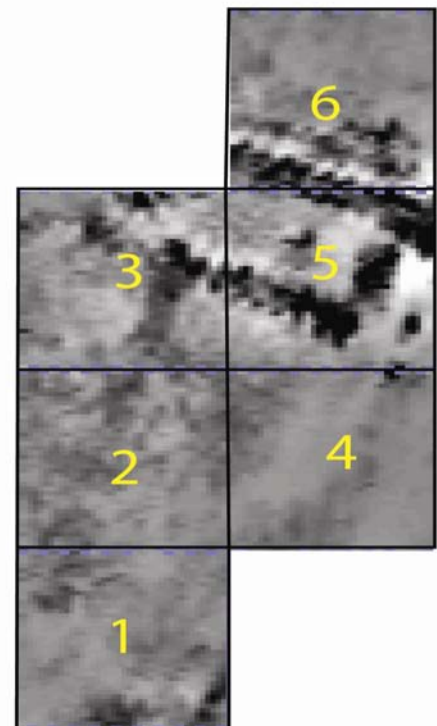
These changes will be recorded by the machine so that the results can be looked at on a computer.




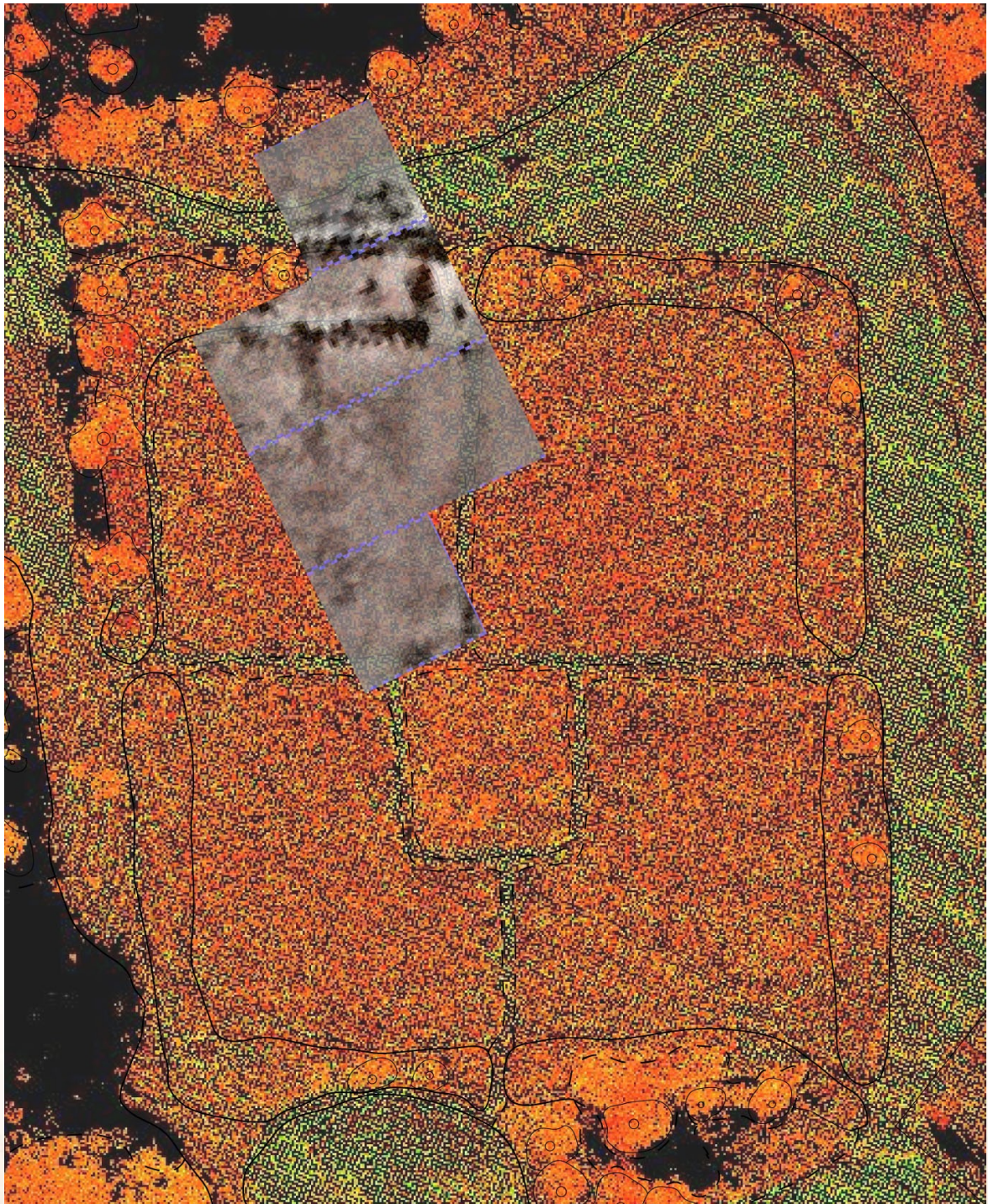
	Centre for Applied Archaeology Joule House The Crescent Salford M5 4NW	Title: Processed Resistivity Results, processed by high pass filter, despite interpolation.	Key: 196.34 163.79 131.24 98.68 86.13 33.58 1.02 ohm -31.53 -64.08 -96.64 -129.19 -161.74 -194.30
	Site Name: Melandra Castle Site Code: NI-MC-11 Drawing Ref: Fig 5 Date Drawn: 5/10/11 Drawn By: KW	Scale: 0 20m	

Here are some examples of how geophysical results will look when they have been downloaded onto the computer. These pictures were made by a resistivity machine. The darker lines show where archaeological features have been found, on this site these were ditches.

The numbers on the picture below show which area of ground the readings were taken in so that the image can be linked to maps or plans of the site.

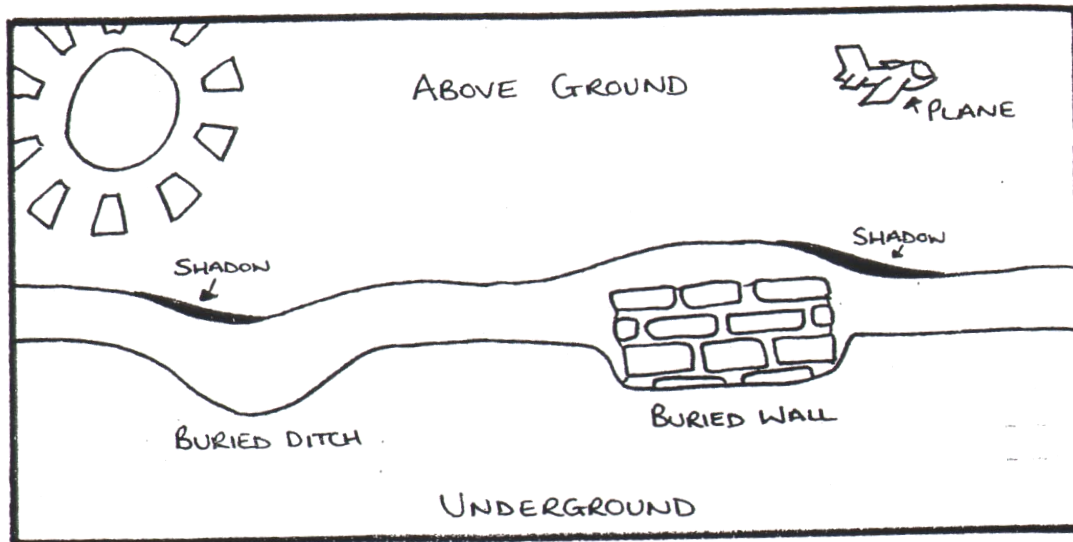


	Centre for Applied Archaeology Joule House The Crescent Salford M5 4NW	Title: Grid numbers indicated	Key: — Edge of Grid 0 Grid number
	Site Name: Melandra Castle Site Code: NI-MC-11 Drawing Ref: Fig 6 Date Drawn: 5/10/11 Drawn By: KW	Scale: 0 20m	

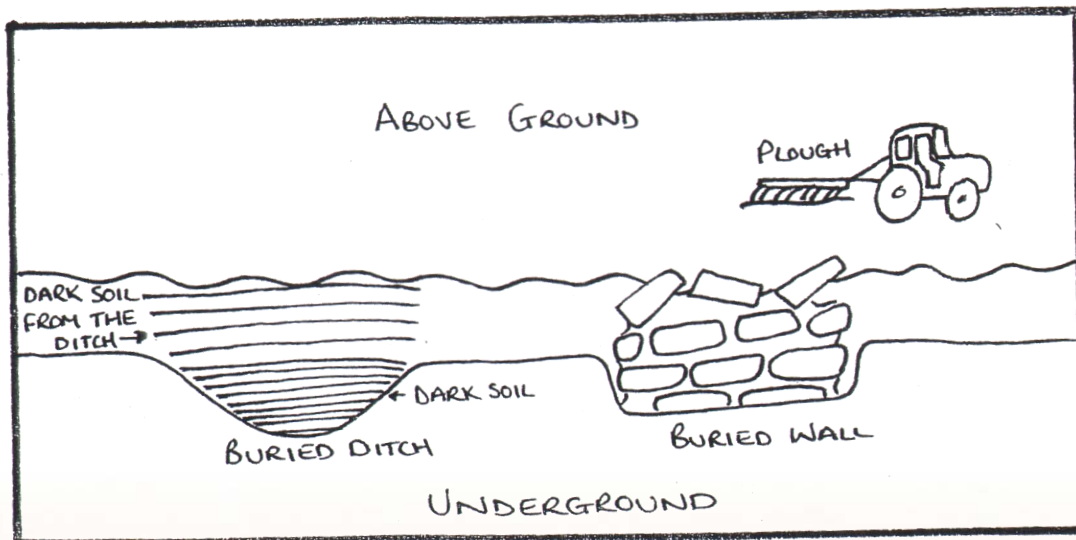


This picture shows a 3D scan of the Fort. The shapes you can see are made by plants and grass and lumps and bumps in the ground.

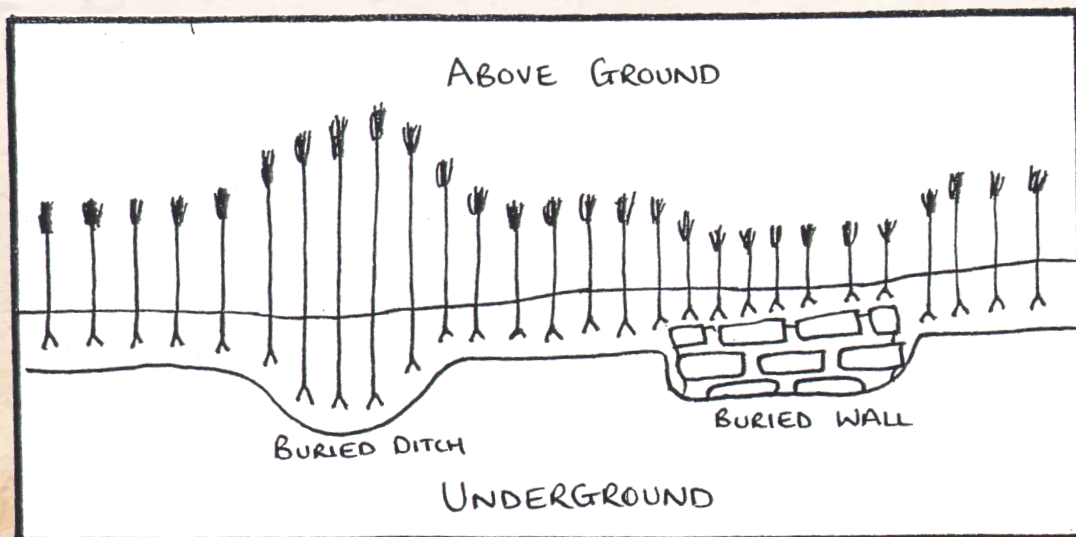
With the results laid on top we can see where on the ground the readings were taken.



①How A Shadow Site Is Made



②How A Soil Mark Is Made



③How A Crop Mark Is Made

Excavation Factsheet



Excavation is the fancy name for digging and it happens when archaeologists know what they are looking for and where to look. Digging is usually the last work done on a site as it often means that the remains are destroyed in the process.

Excavation can either be done by hand using shovels and mattocks or using a mechanical digger which is watched over by an archaeologist.



why do we dig?

Excavation helps us to see more clearly the buried remains of buildings or to find artefacts used on the site in the past. By digging down through the layers we also get to see how the soil was formed and if the whole building can be seen in plan. This can tell us lots about how the building was built and what was done there.

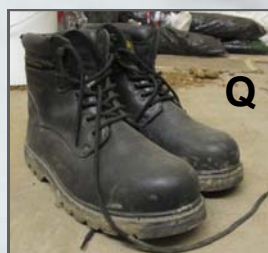
what happens on site?

Excavation is not just all about digging there are other things that have to be done as well. These including recording and taking measurements from the remains found so that we will have a complete record of the site even after it's been dug and covered over again! All the artefacts are cleaned and studied as well so that everything on site is looked at closely.

Archaeologists record what they find by drawing them to scale (making them an exact replica of the original but 20 or 50 times smaller) and taking photos and measurements. They also write detailed descriptions of everything to explain what cannot be seen on the photos and drawings.



What's that for?





Name : _____

What's that for?



A

What is it? _____

What's it for? _____

B

What is it? _____

What's it for? _____

C

What is it? _____

What's it for? _____

D

What is it? _____

What's it for? _____

E

What is it? _____

What's it for? _____

F

What is it? _____

What's it for? _____

G

What is it? _____

What's it for? _____

H

What is it? _____

What's it for? _____

I

What is it? _____

What's it for? _____

K

What is it? _____

What's it for? _____

L

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M

What is it? _____

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N

What is it? _____

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O

What is it? _____

What's it for? _____

P

What is it? _____

What's it for? _____

Q

What is it? _____

What's it for? _____

R

What is it? _____

What's it for? _____

S

What is it? _____

What's it for? _____

J

What is it? _____

What's it for? _____

will it rot away?



Archaeology is Rubbish!!

No really, it is! Most of the objects that archaeologists find and study were thrown away by people in the past. If they'd kept it safe we'd never find it!

The only problem is that not everything that was thrown away survives today because it's rotted away.

Here's a clue.....

Some things will rot slowly, these are organic (made from plants and animals).

Others will corrode (go rusty).

Write your answers on the answer sheet.



What will the things we throw out today tell the archaeologists of the future? Can you work out what will be left, which of these things will rot away and which won't?





Name :

Will it rot away?

Things that will rot slowly

Things that will rot quickly

Things that won't rot at all

What is it made of?

Will it break up easily?

Can it be recycled?

Is it organic (natural)?

Is it man made?

Is it large or small?

Make a list of the objects you think will still be left in 100 years time.....



Name : _____

Some old rubbish!

So if archaeology is rubbish how can we use it to tell us about the past?

Well, we can learn what people used and threw away which can tell us about their lives. It tells us if they were rich or poor, what sort of things they ate and drank, what they used for cooking and what they did in their spare time.

What do you think the archaeologists of the future will say about us based on our rubbish?

What will they think we eat or play with or wear?

Will they think we are rich or poor?

How will they think we lived?



This is a clay pipe from the 19th century. They are very common on archaeological sites and can tell us lots about who owned them.

It tells us what sort of clay was available and from where - trade and travel
what designs were popular - fashion
and how rich people were depending on the amount of decoration on the pipes.



Sort through the modern rubbish and see what it can tell you about the person who threw it away.

What was in the rubbish?

Write as much as you can about the person who threw the rubbish away.

Newton Hall Factsheet

Although there is only 1 building left at Newton Hall now we have all sorts of information from the past telling us about what used to be here. Old maps are very important and people in the past were also interested in history so they wrote about the hall too.

800 years ago.....

In 1211 the Lord of Longdendale Thomas de Burgh split his land in Mottram into 7 smaller areas called manors, Newton was one of these. It was run by Hamo de Massey who became the Lord of Newton Manor.



This is the earliest map we have for the Hall from 1847

700 years ago.....

By 1360 Robert de Newton is recorded as 'holding the manor for the Lord'. It may have been this man or one of his sons or grandsons who built the hall.

700-600 years ago...

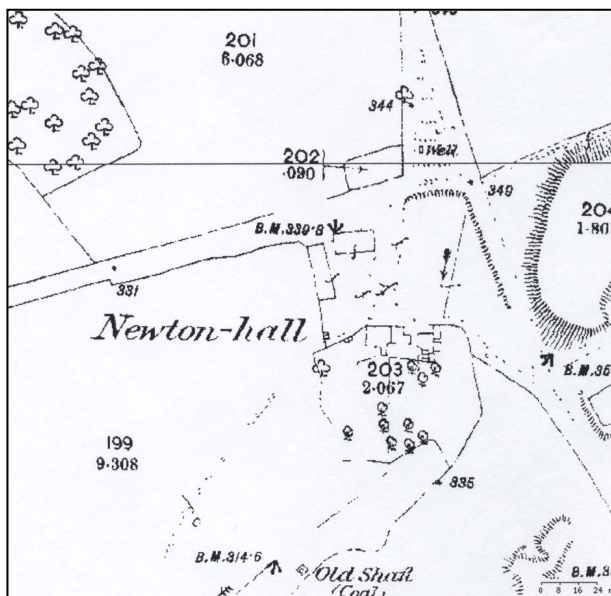
When the hall was restored in the 1960s a sample of wood was tested and showed that the hall was built some time in the early 14th or 15th century. That is the 1300s or 1400s. It is thought that it might have been longer in length when first built than it is now.



This is how the inside of the Hall looked after its restoration.

500 years ago.....

The first time the hall is mentioned in historic documents is in 1557 when it appears in the will of John Newton who was a Lord of the Manor of Newton at the time. He was part of the same family as Robert de Newton.



The 1871 map of the Hall/farm.

400 years ago.....

In 1617 the hall is mentioned again in Alexander Newton's will which tells us all sorts of things. Things like how animals and cereals were both farmed there and that other buildings were there for stables and storage.

300 years ago.....

In 1711 the last of the Newton family sold the Hall to the Duckenfield family who were the owners of the neighbouring manor. They leased the Hall to local farmers and turned it into a working farm.

200 years ago.....

Census records from 1847 show that the Hall/farm had 3-4 families living there in small cottages as the Hall building had become a barn. There was also another stone built barn and a cowhouse on the site.



The Hall in 1900 when it was part of the farm.

100 years ago.....

In the early 20th century the Hall building was extended at the eastern end and the wooden frame had been filled in by brick.

The past 45 years.....

By 1967 the farm had stopped being used and all the buildings demolished. During the demolition work the wooden framing of the Hall was found and the owners, Kenyons, decided to restore the building. The way the Hall looks now is the result of the restoration work



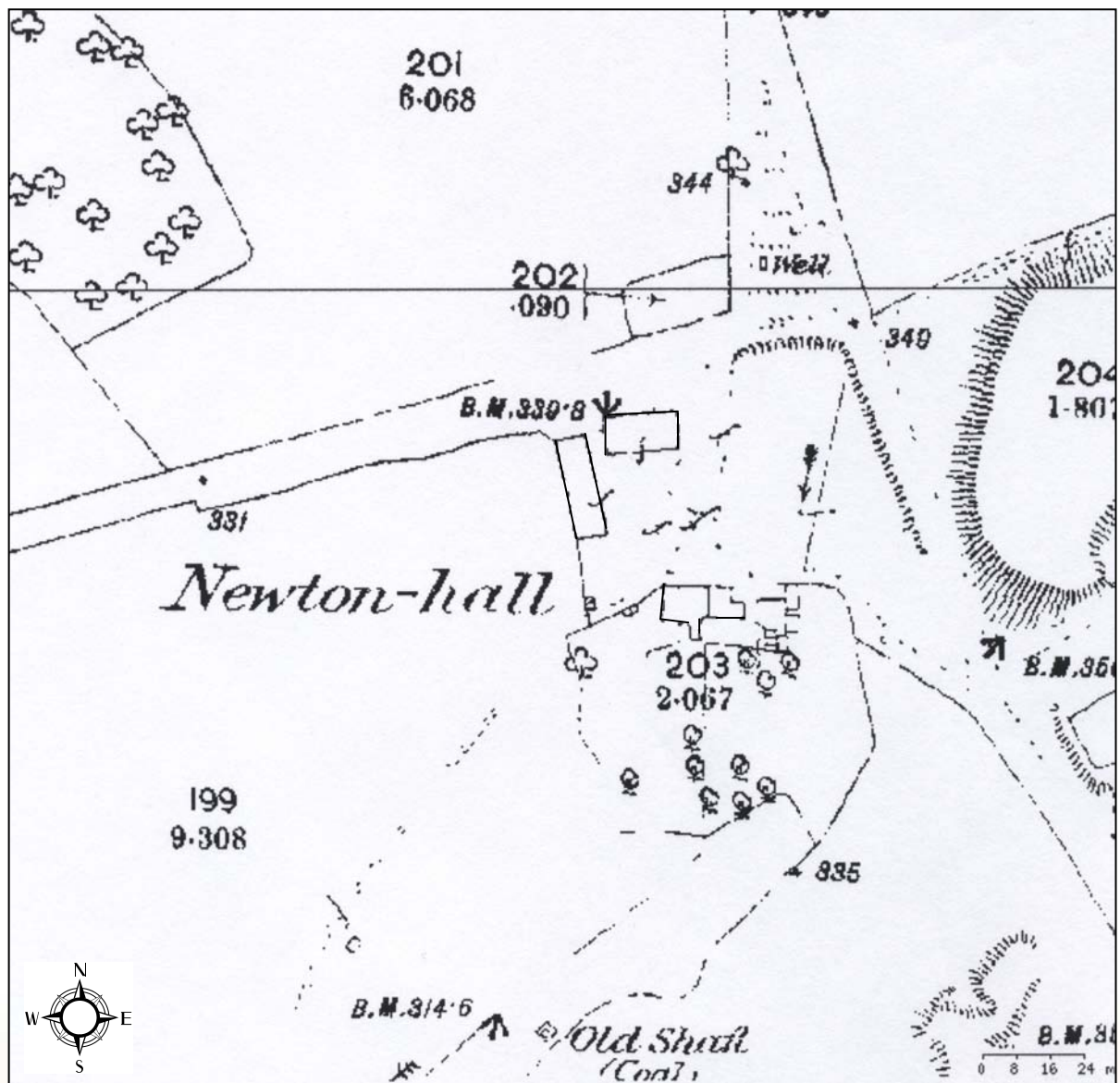
How the Hall looked during demolition.



1847 tithe map of Newton Hall

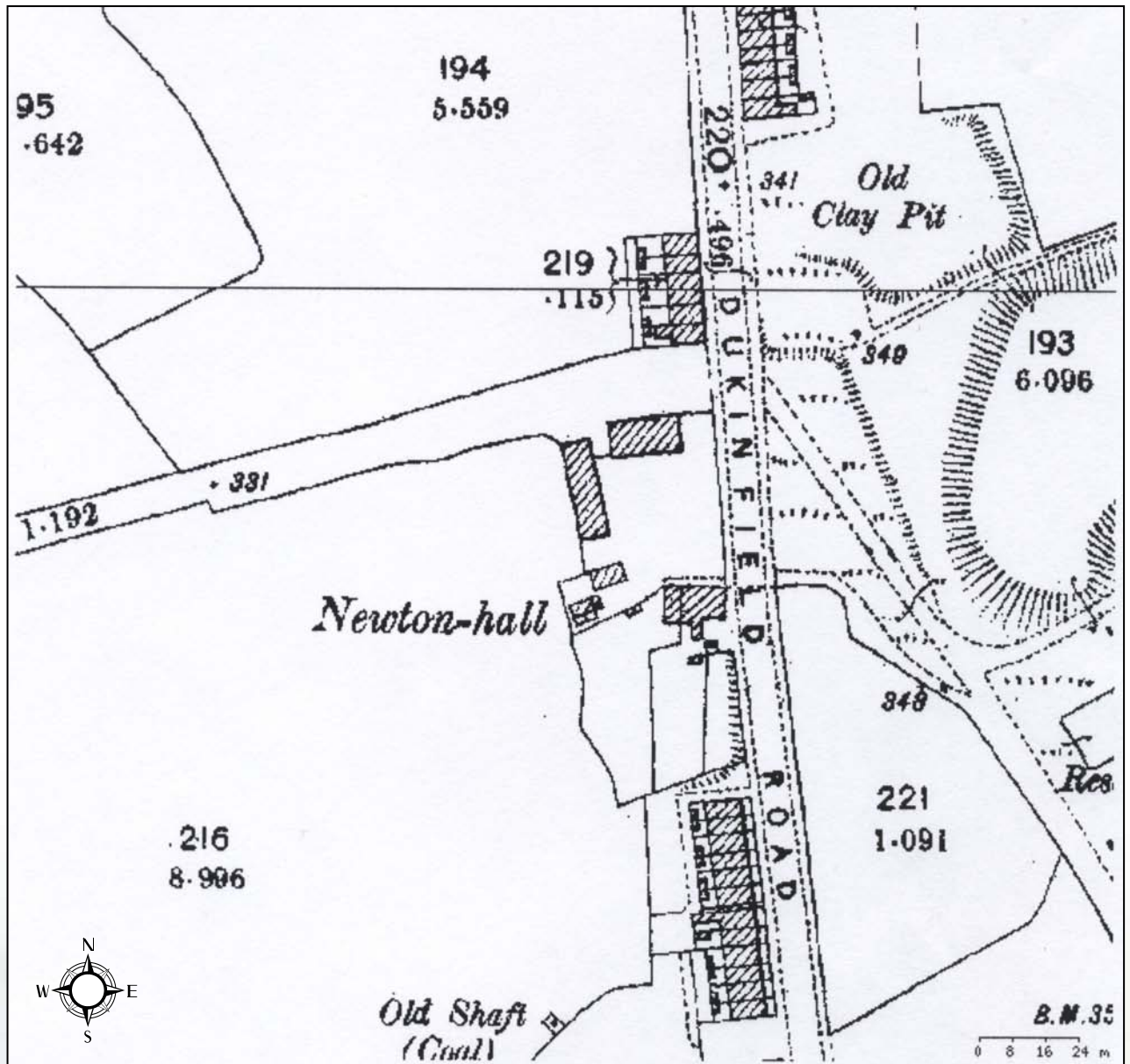
This map shows how the area around the Hall looked after it had become a farm in 1711. By the time this map was made very few people in the area knew or remembered that there had ever been an important building here in the past!

What we now know as Newton Hall was part of the long building on the western side of the map. The other buildings were barns with the farmhouse to the south.



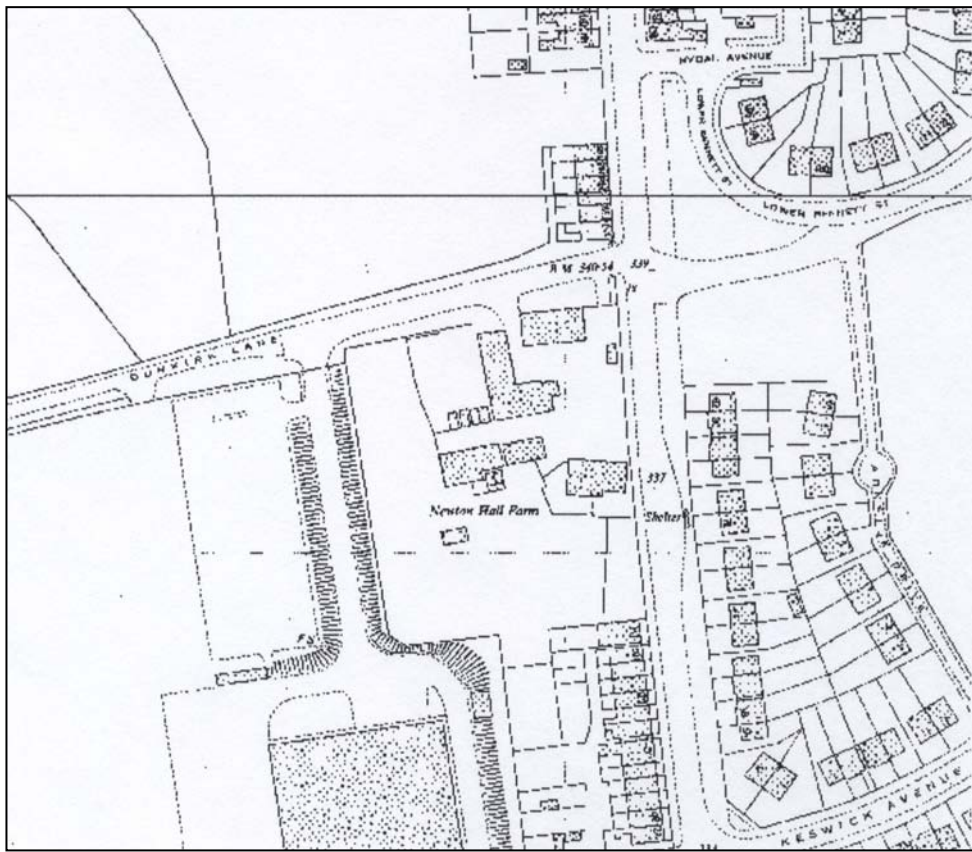
1871 Ordnance Survey map.

This map shows the farm after one of the barns east of the Hall building had been demolished. It also shows how the farmhouse has been split into two separate houses.

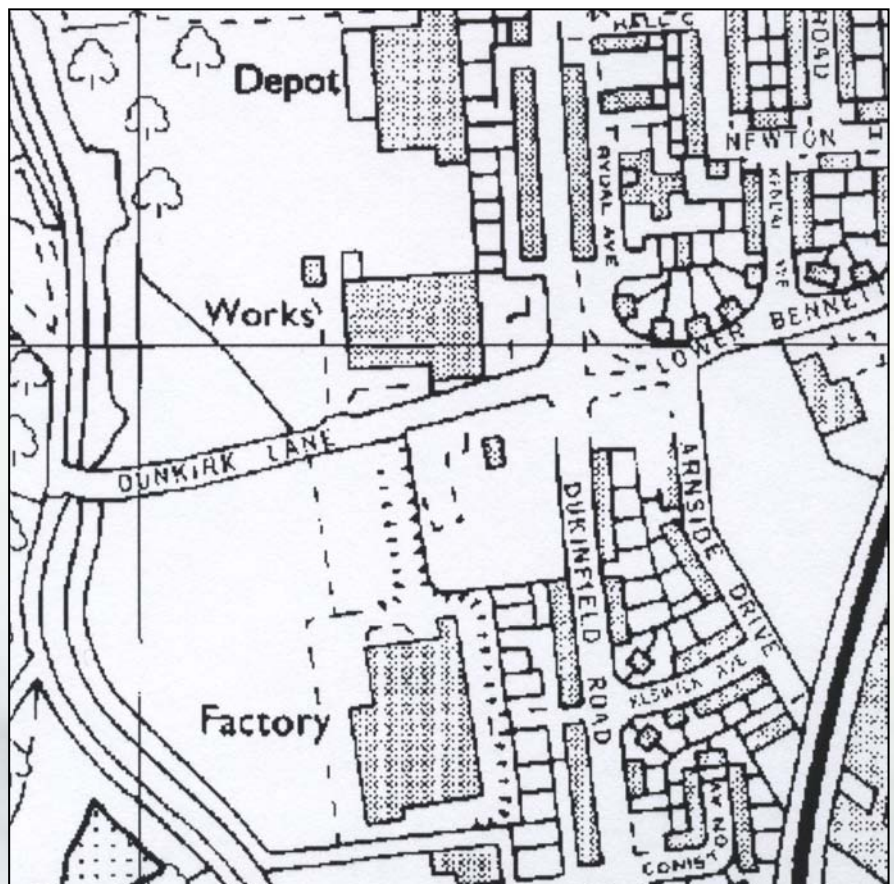


1898 Ordnance Survey map.

This map was made when the area around the Hall/farm was being surrounded by more modern houses and roads needed for the workers in the new industrial mills nearby. As you can see the main road cuts right through the farms land!



1966



1991

20th century Ordnance Survey maps.

These maps show how more and more people moved into the area and built houses and factories. It also shows the area around the Hall before and after the farm was demolished. As you can see the Hall that is still there now is much smaller than the barn it was part of!

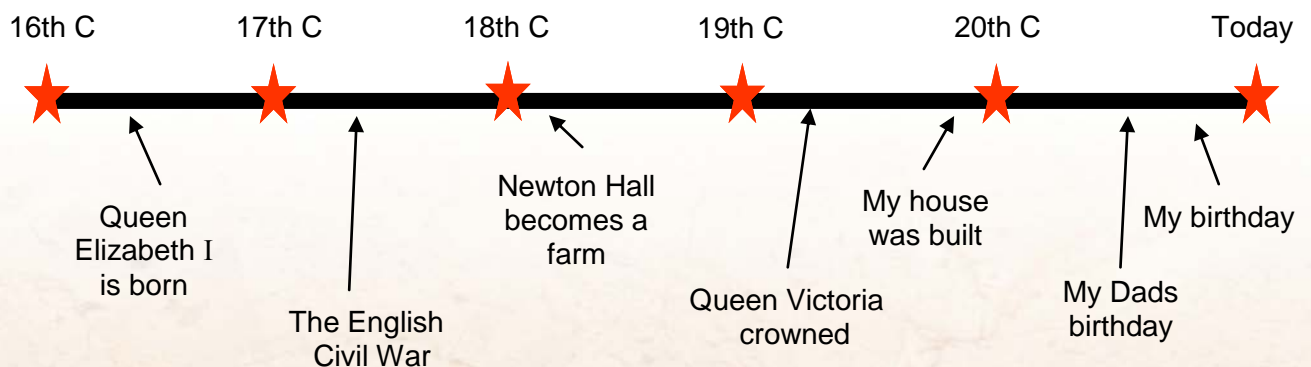
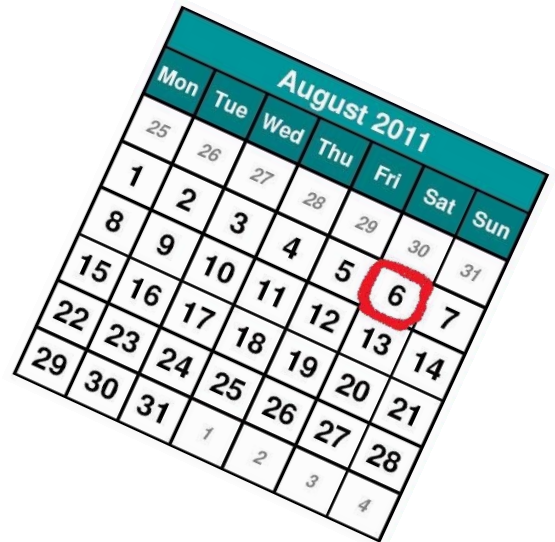
So when did it happen?

Sometimes dates can be so long ago it's hard to imagine when things actually happened! To make it easier to understand dates can be put onto a timeline with other more familiar events like birthdays and special occasions.

Either as a class or in smaller groups make a timeline showing important dates in the history of Newton Hall and in your lives.

You could include your birthday and your parents or grandparents birthdays (if you know them!) as well as the year your school was built or the year your favourite pop song got to number 1!

Make sure you label each century and the year each event happened in.



Centuries can be so confusing!!

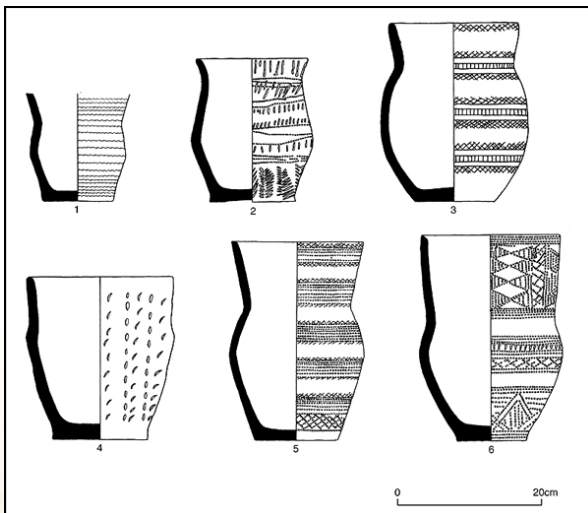
Remember the number at the beginning of the date is not the same as the century number. So, the 1900s are in the 20th century, not the 19th!

2000s - 21st Century
 1900s - 20th Century
 1800s - 19th Century
 1700s - 18th Century
 1600s - 17th Century
 1500s - 16th Century

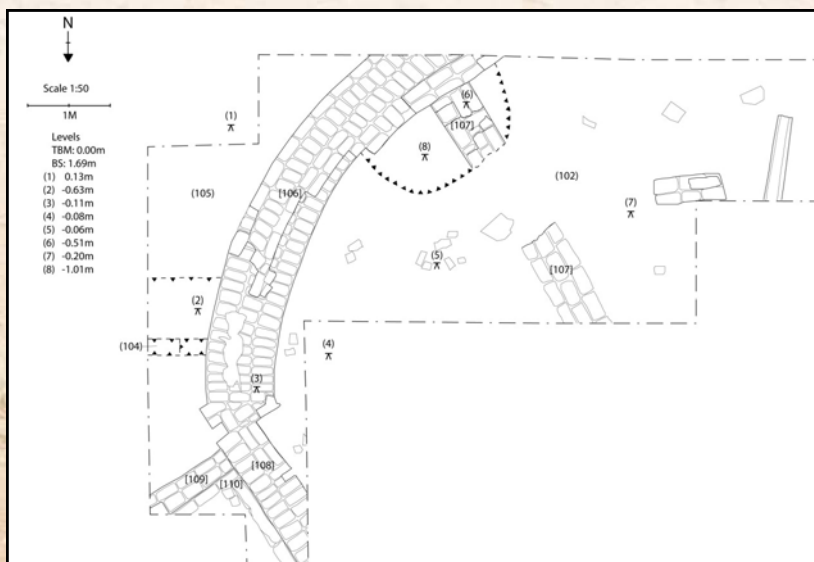
1400s - 15th Century
 1300s - 14th Century
 1200s - 13th Century
 1100s - 12th Century
 1000s - 11th Century

Post-Excavation

Post-excavation work is not excavating posts! It's the work that goes on after the excavation is over. It involves sorting through all the records made on site (drawings, descriptions & photos) and interpreting them, studying the finds and recording them and writing a report on the whole site. This is all done so that anyone who is interested in the site can find out about it after all the archaeological work is finished.



A lot of post-excavation work involves looking at the artefacts found on site, most of this is pottery. These objects can tell us all sorts of things about the people who made and used them. This is why archaeologists look very closely at them and take measurements, photos and drawings of them to get the most information they can.



The final stage of post-excavation work is writing the report on the whole site. This uses all the information from the drawings, photos and written descriptions made on site as well as all of the finds studies done afterwards.

With all this useful information the archaeologist writing the report can make interpretations about the people who lived on the site in the past and fit it in with the history of the local area.



Name :

Innterrogate the Artefact!

The best way to get information is to ask questions and all good detectives have great interrogation skills! Answer the questions below about your artefact to see what it can tell you about the past.

What colour is it?

This will help you decide what it is made of and if it has been in the ground a long time.

What is it made of?

Is it smooth or rough? How heavy is it? Is it hard or soft?

How do you think it was made?

Is it all in one piece or made from several parts, and if so how was it put together? Is it all made from the same material?

If it is made of metal,

Is it rusty?

Is it sharp?

Is it heavy?

Who might have owned or used it? What would they use it for and how often? Were they male or female, rich or poor? Was it valuable to them?

If it is made of clay (pottery),

Is it rough or smooth?

Is it painted?

Does it have any inclusions?

These are small stones and pieces of charcoal in the clay of the pottery.

What might it have been used for? Does it have a sharp edge for cutting or a handle to hold it with? Try holding it and see what can be done with it.

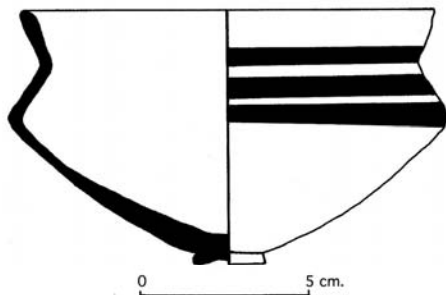
So, what do you think it is?

Put all the information you've gathered together, what does it tell us about the artefact?

Recording Pottery

Archaeologists use drawings and photographs to record all the pottery they find. Both ways are used to show as much detail of the pot as possible and can help you to reconstruct the original pot if only fragments are found.

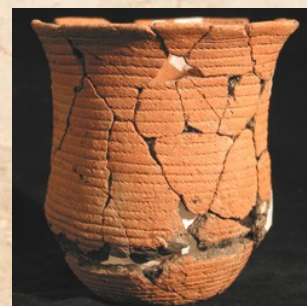
All archaeological drawings and photos need to be accurate and contain a scale bar to show how big the pot is in real life. These records can then be used for study even if the pot is no longer available.



A fragment of pottery is called a sherd. Rim sherds are from the top of the pot and base sherds are from the bottom.

Drawing pottery encourages you to look more closely at the object and shows the shape and texture more clearly. It also takes away the issues of light and camera problems when taking photos!

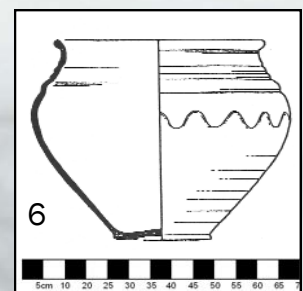
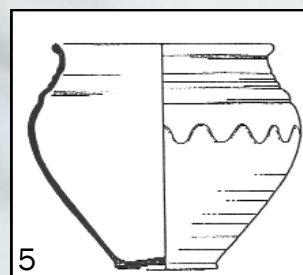
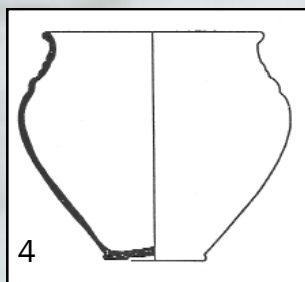
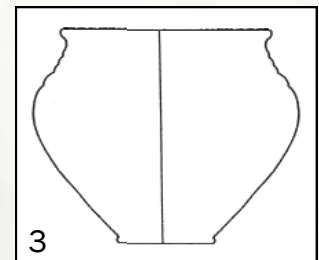
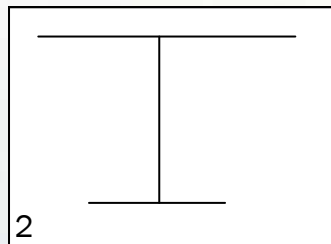
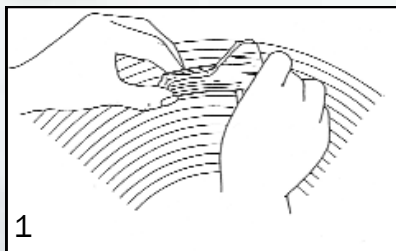
Taking good photographs is important too as it shows the colour of the pottery and more of a 3D view.

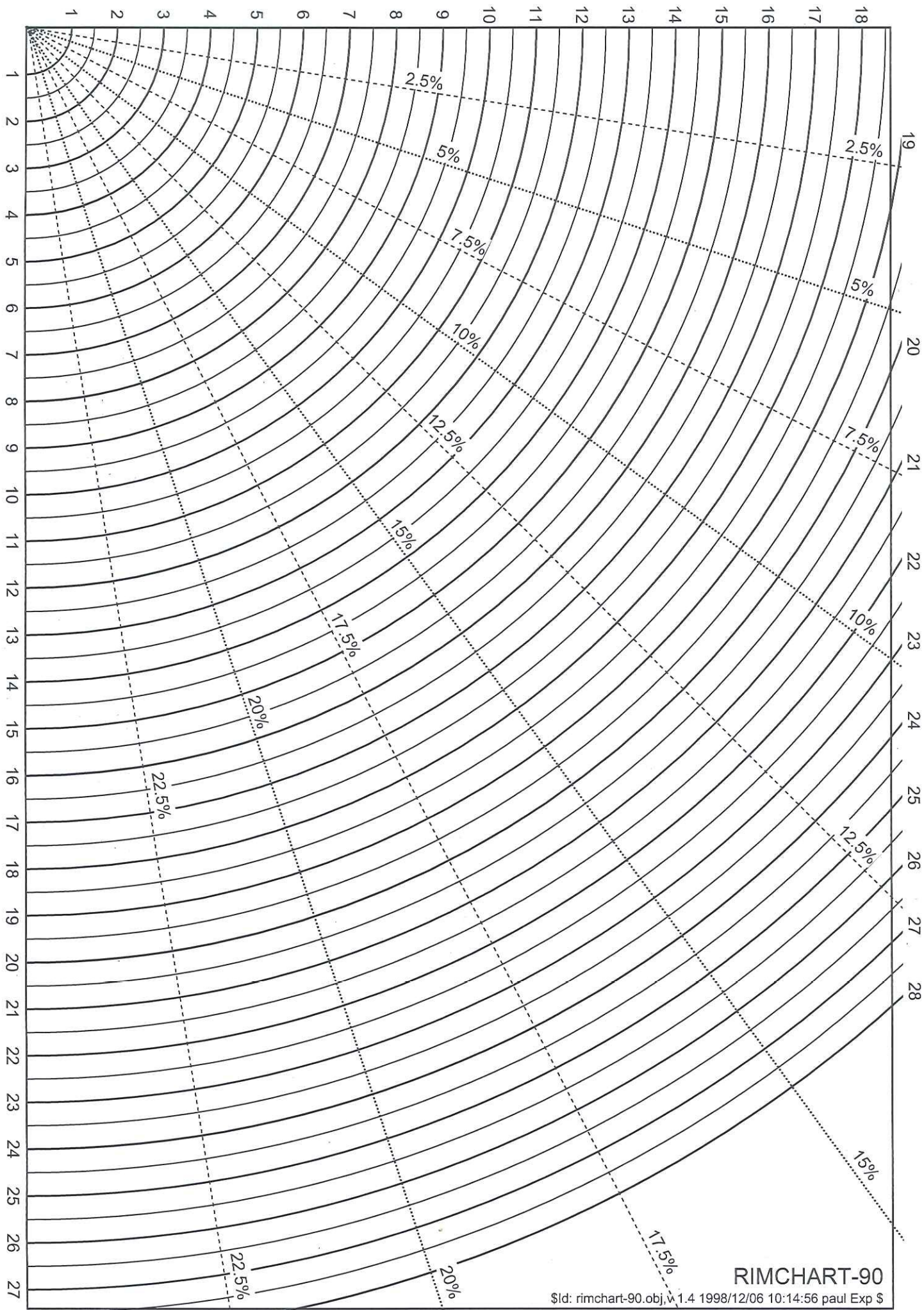


Drawing Pottery

You will need: **paper** **pencil** **ruler** **rim chart**

1. Place the sherd onto the rim chart and slide it along until it matches one of the curved lines. The number at the end of the line is the measurement in cm of the radius of the pot, double this number to get the diameter. i.e. if the curve says 4cm, the diameter of the pot will be 8cm.
2. Draw a line at the top of your paper the same length as the diameter of your pot. Now measure the height of the sherd, it doesn't matter if it's only small or has no base, the drawing will still tell us a lot of information. Draw a line down from the centre of the first line that measures the same height as the pot.
3. If there is some of the pots base left as part of the sherd measure this on the rim chart in the same way as before and draw a line the same length at the bottom of the T shape, making sure the T is in the centre.
4. Now measure and carefully draw the outline of your sherd between the top and bottom lines on both sides. Now you have reconstructed the shape of your pot!
5. Measure the thickness of your sherd and draw a line the same distance from your pots outline on the left-hand side only, colour the space to show the thickness of the pot.
6. On the right-hand side copy any decoration you can see and used shading and dots to show texture. Finish your drawing with a scale bar.





RIMCHART-90

\$Id: rimchart-90.obj,w 1.4 1998/12/06 10:14:56 paul Exp \$

So what do we know about Newton Hall?

Now we've researched it, dug it up and found out all we can about Newton Hall, what exactly do we know?

It's time to put your detective skills to the test and bring everything you've found out together to make up a picture of life in the Hall.



Archaeologists call this 'post-excavation', not because they start looking at posts but because it comes after everything else! When they've finished they write a report all about the site so that anybody can find out about it and what was done there.

Get together in your class and write down everything you've found out. Make sure you include dates, people's names and facts about how the hall looked and the things that were in it!



Using all the information you've got try and think about what it was like to live at the Hall. Look at what was found on the dig and see what it tells us about the people that lived and worked there. You could also look in libraries for more general history of things like clothing and jobs.



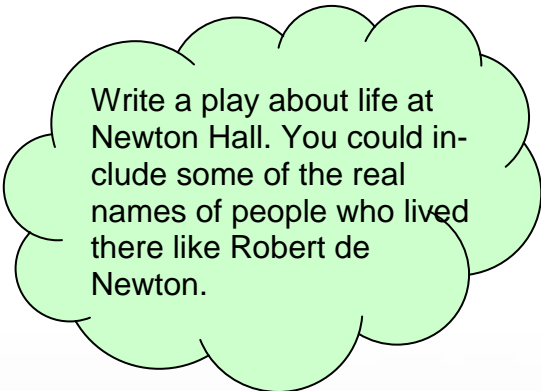
Now decide how you're going to share this with the rest of your community. You don't have to write a report, maybe you could do something more fun like a play, newspaper, painting or poem?



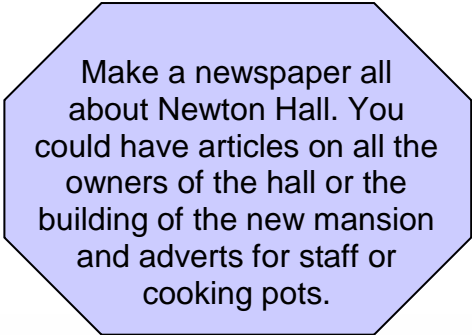
So, how will you share your information? You could use all kinds of sources, both primary and secondary, to help with your display:

- Maps
- Written documents
- Photos
- Finds from the dig
- Photos from the dig
- Drawings or notes from the dig
- Anything else you have found out

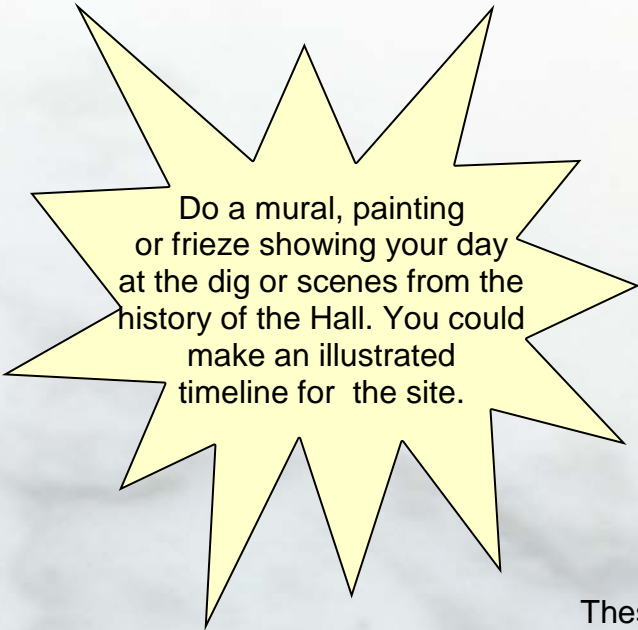
Here's a few ideas for your class display.....



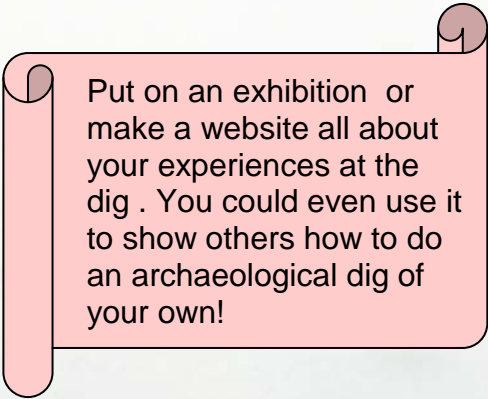
Write a play about life at Newton Hall. You could include some of the real names of people who lived there like Robert de Newton.



Make a newspaper all about Newton Hall. You could have articles on all the owners of the hall or the building of the new mansion and adverts for staff or cooking pots.



Do a mural, painting or frieze showing your day at the dig or scenes from the history of the Hall. You could make an illustrated timeline for the site.



Put on an exhibition or make a website all about your experiences at the dig. You could even use it to show others how to do an archaeological dig of your own!

These are just a few ideas but there are lots of different ways you can share your experiences with your friends and family. If you have a good idea go for it and be creative!